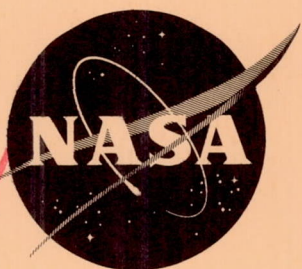


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SPACE FLIGHT  
LANGLEY FIELD, VIRGINIA

## TECHNICAL NOTE

D-690-II

AERODYNAMIC LOADS AT MACH NUMBERS FROM 0.70 TO 2.22  
ON AN AIRPLANE MODEL HAVING A WING AND CANARD  
OF TRIANGULAR PLAN FORM AND EITHER SINGLE  
OR TWIN VERTICAL TAILS

SUPPLEMENT II - TABULATED DATA FOR THE MODEL WITH  
TWIN VERTICAL TAILS

By Victor L. Peterson and Gene P. Menees

Ames Research Center  
Moffett Field, Calif.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WASHINGTON

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## INTRODUCTION

Tabulated results of a wind-tunnel investigation of the aerodynamic loads on a canard airplane model with twin vertical tails are presented for Mach numbers from 0.70 to 2.22. The Reynolds number for the measurements was  $2.9 \times 10^6$  based on the wing mean aerodynamic chord. The results include local static-pressure coefficients measured on the wing, body, and one of the vertical tails for angles of attack from  $-4^\circ$  to  $16^\circ$ , angles of sideslip of  $0^\circ$  and  $5.3^\circ$ , and nominal canard deflections of  $0^\circ$  and  $10^\circ$ . Also included are section force and moment coefficients obtained from integrations of the local pressures and model-component force and moment coefficients obtained from integrations of the section coefficients. Geometric details of the model are shown in figure 1 and the locations of the pressure orifices are shown in figure 2. An index to the data contained herein is presented in table I and definitions of nomenclature are given below.

Detailed descriptions of the model and experiments and a brief discussion of some of the results are given in TN D-690. Tabulated results of measurements of the aerodynamic loads on the same canard model but having a single vertical tail instead of twin vertical tails are presented in TN D-690-I.

## NOTATION

|          |                                         |
|----------|-----------------------------------------|
| b        | span of surface                         |
| c        | local chord of surface                  |
| $c_{av}$ | average chord of surface, $\frac{S}{b}$ |



- $\bar{c}$  mean aerodynamic chord of wing
- $c_{m_{LE}}$  pitching-moment coefficient of wing section referred to the leading edge of section,  $-\int_0^{1.0} (c_{p_l} - c_{p_u}) \left(\frac{x}{c}\right) d\left(\frac{x}{c}\right)$
- $c_{m_W}$  pitching-moment coefficient of wing section referred to the projection of the  $0.2\bar{c}$  point on the body reference line,  $c_{m_{LE}} + \left(\frac{\bar{x}}{c}\right) c_{N_W}$
- $c_{n_{LE}}$  yawing-moment coefficient of vertical-tail section referred to the leading edge of section,  $\int_0^{1.0} (c_{p_R} - c_{p_L}) \left(\frac{x}{c}\right) d\left(\frac{x}{c}\right)$
- $c_{n_V}$  yawing-moment coefficient of vertical-tail section referred to the projection of the  $0.2\bar{c}$  point on the body reference line,  $c_{n_{LE}} + c_{Y_V} \left(\frac{\bar{x}}{c}\right)$
- $c_{N_B}$  body-section coefficient of force normal to the body surface in the vertical plane of symmetry, positive upward,  $-\int_{0.05}^{1.05} c_p \sin \theta d\left(\frac{\theta}{2\pi}\right)$
- $c_{N_W}$  normal-force coefficient of wing section,  $\int_0^{1.0} (c_{p_l} - c_{p_u}) d\left(\frac{x}{c}\right)$
- $c_{Y_B}$  body-section coefficient of force normal to the body surface in the lateral plane of symmetry, positive right,  $-\int_{0.05}^{1.05} c_p \cos \theta d\left(\frac{\theta}{2\pi}\right)$
- $c_{Y_V}$  side-force coefficient of vertical-tail section,  $\int_0^{1.0} (c_{p_L} - c_{p_R}) d\left(\frac{x}{c}\right)$
- $C_{b_V}$  bending-moment coefficient of vertical tail referred to the body center line,  $\frac{S_V}{S_W} \frac{b_V}{b_W} \int_{0.011}^{1.0} \left(\frac{c}{c_{av}}\right) \left(\frac{y}{b}\right) c_{Y_V} d\left(\frac{y}{b}\right)$

$C_{bW}$  bending-moment coefficient of wing referred to the body center line,  $-\int_{0.175}^{1.0} \left(\frac{c}{c_{av}}\right) \left(\frac{y}{b/2}\right) c_{NW} d\left(\frac{y}{b/2}\right)$

$C_{mB}$  pitching-moment coefficient of body referred to the projection of the 0.21 $\bar{c}$  point on the body reference line,  $\frac{\pi l^2}{S_W} \frac{l}{\bar{c}} \int_0^{1.0} \left(\frac{d}{l}\right) \left(\frac{\bar{x}}{l}\right) c_{NB} d\left(\frac{x}{l}\right)$

$C_{mW}$  pitching-moment coefficient of wing referred to the projection of the 0.21 $\bar{c}$  point on the body reference line,  $\int_{0.175}^{1.0} \left(\frac{c}{\bar{c}}\right) \left(\frac{c}{c_{av}}\right) c_{mW} d\left(\frac{y}{b/2}\right)$

$C_{nB}$  yawing-moment coefficient of body referred to the projection of the 0.21 $\bar{c}$  point on the body reference line,  $\frac{\pi l^2}{S_W} \frac{l}{b_W} \int_0^{1.0} \left(\frac{d}{l}\right) \left(\frac{\bar{x}}{l}\right) c_{YB} d\left(\frac{x}{l}\right)$

$C_{nV}$  yawing-moment coefficient of vertical tail referred to the projection of the 0.21 $\bar{c}$  point on the body reference line,  $\frac{S_V}{S_W} \frac{b_V}{b_W} \int_{0.011}^{1.0} \left(\frac{c}{c_{av}}\right) \left(\frac{c}{b}\right) c_{nV} d\left(\frac{y}{b}\right)$

$C_p$  pressure coefficient,  $\frac{p - p_\infty}{q_\infty}$

$C_{NB}$  normal-force coefficient of body,  $\frac{\pi l^2}{S_W} \int_0^{1.0} \left(\frac{d}{l}\right) c_{NB} d\left(\frac{x}{l}\right)$

$C_{NW}$  normal-force coefficient of wing,  $\int_{0.175}^{1.0} \left(\frac{c}{c_{av}}\right) c_{NW} d\left(\frac{y}{b/2}\right)$

$C_{YB}$  side-force coefficient of body,  $\frac{\pi l^2}{S_W} \int_0^{1.0} \left(\frac{d}{l}\right) c_{YB} d\left(\frac{x}{l}\right)$

$C_{YV}$  side-force coefficient of vertical tail,  $\frac{S_V}{S_W} \int_{0.011}^{1.0} \left(\frac{c}{c_{av}}\right) c_{YV} d\left(\frac{y}{b}\right)$

$d$  local body diameter

$l$  body length

$l_0$  length of body for closure at both ends



|              |                                                                                                                                                                                 |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| M            | free-stream Mach number                                                                                                                                                         |
| p            | local pressure on model                                                                                                                                                         |
| $p_{\infty}$ | free-stream static pressure                                                                                                                                                     |
| $q_{\infty}$ | free-stream dynamic pressure                                                                                                                                                    |
| r            | local body radius                                                                                                                                                               |
| $r_0$        | maximum body radius                                                                                                                                                             |
| S            | plan-form area of wing including portion covered by the body or<br>plan-form area of vertical tail extended to the wing chord<br>plane                                          |
| x            | distance measured from leading edge of wing or tail surface or<br>from body nose (positive rearward)                                                                            |
| $\bar{x}$    | distance measured from the wing or vertical-tail leading edge<br>or a body station to the projection of the 0.21 $\bar{c}$ point on the<br>body center line (positive rearward) |
| y            | distance measured from body center line (positive away from body)                                                                                                               |
| $\alpha$     | angle of attack of wing root chord, deg                                                                                                                                         |
| $\beta$      | angle of sideslip measured between relative wind and vertical<br>plane of symmetry, deg                                                                                         |
| $\delta$     | angle of deflection of canard surface relative to wing plane,<br>deg (positive when trailing edge is down)                                                                      |
| $\theta$     | meridian angle on body, radians (measured clockwise from left<br>wing chord plane looking downstream)                                                                           |

## Subscripts

|    |                                                  |
|----|--------------------------------------------------|
| cp | distance to section chordwise center of pressure |
| l  | wing lower surface                               |
| u  | wing upper surface                               |
| V  | vertical tail                                    |
| B  | body                                             |

L left side of vertical tail  
R right side of vertical tail  
W wing

Configurations are denoted by the following letters used in combination:

B body  
C canard  
V vertical tail  
W wing

Ames Research Center  
National Aeronautics and Space Administration  
Moffett Field, Calif., Mar. 29, 1961

A  
4  
1  
7



TABLE I.- INDEX TO TABULATED DATA

9

| Configu-<br>ration | $\delta$ ,<br>deg | $\beta$ ,<br>deg | Table numbers |            |                           |        |                           |                      |        |                           |                      |
|--------------------|-------------------|------------------|---------------|------------|---------------------------|--------|---------------------------|----------------------|--------|---------------------------|----------------------|
|                    |                   |                  | Body          |            |                           | Wing   |                           |                      | Tail   |                           |                      |
|                    |                   |                  | $C_p$         | $C_N, C_Y$ | $C_N, C_m,$<br>$C_Y, C_n$ | $C_p$  | $C_N, C_m,$<br>$x_{cp}/c$ | $C_N,$<br>$C_m, C_b$ | $C_p$  | $C_Y, C_n,$<br>$x_{cp}/c$ | $C_Y,$<br>$C_n, C_b$ |
| BVW                |                   | 0                | II(a)         | VIII(a)    | XIV                       | III(a) | IX(a)                     | XV                   | IV(a)  | X(a)                      | XVI                  |
|                    |                   | 5.3              | V(a)          | XI(a)      | XIV                       | VI(a)  | XII(a)                    | XV                   | VII(a) | XIII(a)                   | XVI                  |
| BVWC               | -0.5              | 0                | II(b)         | VIII(b)    | XIV                       | III(b) | IX(b)                     | XV                   | IV(b)  | X(b)                      | XVI                  |
|                    | 0.5               | 5.3              | V(b)          | XI(b)      | XIV                       | VI(b)  | XII(b)                    | XV                   | VII(b) | XIII(b)                   | XVI                  |
| BVWC               | 10.2              | 0                | II(c)         | VIII(c)    | XIV                       | III(c) | IX(c)                     | XV                   | IV(c)  | X(c)                      | XVI                  |
|                    | 10.7              | 5.3              | V(c)          | XI(c)      | XIV                       | VI(c)  | XII(c)                    | XV                   | VII(c) | XIII(c)                   | XVI                  |
| BW                 |                   | 0                | II(d)         | VIII(d)    | XIV                       | III(d) | IX(d)                     | XV                   |        |                           |                      |

TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP  
(a) BVW

| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990 | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$ |                       |
| M = 0.701 $Q = -0.4.28$      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | 0.046  | 0.008  | -0.018 | -0.041 | -0.047 | -0.054 | -0.062 | -0.041 | 0.068  | 0.001  | -0.022 | -0.033 | -0.045 | -0.009 | -0.001 | 0.058 | 0.0500                |
| 0.1500                       | 0.084  | 0.037  | 0.009  | -0.015 | -0.025 | -0.031 | -0.037 | -0.023 | 0.001  | -0.014 | -0.024 | -0.034 | -0.043 | -0.020 | -0.004 | 0.063 | 0.1500                |
| 0.2500                       | 0.105  | 0.052  | 0.023  | -0.004 | -0.014 | -0.020 | -0.028 | -0.017 | -0.002 | -0.014 | -0.025 | -0.036 | -0.045 | -0.025 | -0.005 | 0.063 | 0.2500                |
| 0.3500                       | 0.088  | 0.038  | 0.012  | -0.011 | -0.027 | -0.026 | -0.037 | -0.027 | 0.003  | -0.006 | -0.023 | -0.036 | -0.046 | -0.024 | -0.005 | 0.061 | 0.3500                |
| 0.4500                       | 0.051  | 0.009  | -0.019 | -0.039 | -0.048 | -0.053 | -0.060 | -0.042 | 0.071  | 0.017  | -0.022 | -0.035 | -0.048 | -0.018 | -0.001 | 0.057 | 0.4500                |
| 0.5500                       | 0.021  | 0.001  | -0.039 | -0.055 | -0.063 | -0.069 | -0.075 | -0.061 | -0.112 | -0.181 | -0.185 | -0.174 | -0.124 | -0.023 | -0.006 | 0.053 | 0.5500                |
| 0.6500                       | 0.005  | -0.027 | -0.044 | -0.064 | -0.066 | -0.068 | -0.075 | -0.071 | -0.091 | -0.135 | -0.162 | -0.159 | -0.122 | -0.045 | -0.011 | 0.050 | 0.6500                |
| 0.7500                       | 0.002  | -0.028 | -0.043 | -0.060 | -0.064 | -0.065 | -0.072 | -0.072 | -0.087 | -0.121 | -0.148 | -0.150 | -0.116 | -0.046 | -0.013 | 0.050 | 0.7500                |
| 0.8500                       | 0.006  | -0.027 | -0.045 | -0.062 | -0.066 | -0.071 | -0.076 | -0.068 | -0.093 | -0.132 | -0.165 | -0.160 | -0.125 | -0.044 | -0.009 | 0.051 | 0.8500                |
| 0.9500                       | 0.016  | -0.022 | -0.037 | -0.061 | -0.065 | -0.070 | -0.074 | -0.063 | -0.116 | -0.179 | -0.191 | -0.182 | -0.136 | -0.024 | -0.003 | 0.053 | 0.9500                |
| M = 0.698 $Q = -0.0.20$      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | 0.051  | 0.016  | -0.008 | -0.031 | -0.037 | -0.043 | -0.050 | -0.030 | -0.012 | -0.023 | -0.107 | -0.095 | -0.098 | -0.023 | -0.004 | 0.056 | 0.0500                |
| 0.1500                       | 0.052  | 0.014  | -0.013 | -0.032 | -0.039 | -0.044 | -0.049 | -0.038 | -0.040 | -0.066 | -0.093 | -0.089 | -0.088 | -0.038 | -0.009 | 0.057 | 0.1500                |
| 0.2500                       | 0.053  | 0.012  | -0.015 | -0.033 | -0.041 | -0.045 | -0.051 | -0.044 | -0.046 | -0.069 | -0.086 | -0.088 | -0.087 | -0.043 | -0.011 | 0.057 | 0.2500                |
| 0.3500                       | 0.054  | 0.011  | -0.011 | -0.030 | -0.042 | -0.041 | -0.049 | -0.041 | -0.039 | -0.071 | -0.092 | -0.091 | -0.090 | -0.041 | -0.009 | 0.057 | 0.3500                |
| 0.4500                       | 0.055  | 0.016  | -0.013 | -0.031 | -0.039 | -0.044 | -0.047 | -0.030 | -0.014 | -0.080 | -0.104 | -0.098 | -0.100 | -0.026 | 0.000  | 0.057 | 0.4500                |
| 0.5500                       | 0.058  | 0.037  | -0.008 | -0.030 | -0.035 | -0.041 | -0.046 | -0.025 | 0.002  | -0.066 | -0.092 | -0.098 | -0.076 | -0.017 | -0.004 | 0.055 | 0.5500                |
| 0.6500                       | 0.059  | 0.015  | -0.006 | -0.030 | -0.037 | -0.039 | -0.043 | -0.034 | -0.029 | -0.058 | -0.081 | -0.089 | -0.076 | -0.031 | -0.007 | 0.055 | 0.6500                |
| 0.7500                       | 0.060  | 0.015  | -0.004 | -0.029 | -0.038 | -0.043 | -0.042 | -0.037 | -0.041 | -0.060 | -0.078 | -0.087 | -0.074 | -0.033 | -0.008 | 0.050 | 0.7500                |
| 0.8500                       | 0.058  | 0.014  | -0.007 | -0.030 | -0.039 | -0.044 | -0.047 | -0.035 | -0.034 | -0.056 | -0.086 | -0.089 | -0.080 | -0.030 | -0.006 | 0.055 | 0.8500                |
| 0.9500                       | 0.052  | 0.010  | -0.005 | -0.035 | -0.039 | -0.044 | -0.046 | -0.031 | -0.003 | -0.066 | -0.096 | -0.104 | -0.087 | -0.017 | -0.001 | 0.055 | 0.9500                |
| M = 0.697 $Q = 03.78$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | 0.023  | -0.010 | -0.035 | -0.053 | -0.057 | -0.064 | -0.069 | -0.053 | -0.116 | -0.061 | -0.194 | -0.158 | -0.153 | -0.032 | -0.007 | 0.056 | 0.0500                |
| 0.1500                       | 0.011  | -0.018 | -0.041 | -0.055 | -0.057 | -0.061 | -0.065 | -0.062 | -0.090 | -0.132 | -0.165 | -0.147 | -0.135 | -0.055 | -0.014 | 0.053 | 0.1500                |
| 0.2500                       | 0.009  | -0.021 | -0.043 | -0.051 | -0.055 | -0.057 | -0.062 | -0.061 | -0.081 | -0.121 | -0.148 | -0.139 | -0.129 | -0.060 | -0.018 | 0.054 | 0.2500                |
| 0.3500                       | 0.011  | -0.021 | -0.040 | -0.056 | -0.061 | -0.060 | -0.067 | -0.063 | -0.088 | -0.137 | -0.163 | -0.151 | -0.137 | -0.058 | -0.014 | 0.053 | 0.3500                |
| 0.4500                       | 0.024  | -0.010 | -0.035 | -0.054 | -0.060 | -0.064 | -0.068 | -0.055 | -0.126 | -0.179 | -0.187 | -0.163 | -0.153 | -0.036 | -0.002 | 0.057 | 0.4500                |
| 0.5500                       | 0.061  | 0.036  | -0.009 | -0.034 | -0.038 | -0.046 | -0.050 | -0.031 | 0.088  | 0.035  | -0.005 | -0.027 | -0.028 | -0.011 | 0.000  | 0.060 | 0.5500                |
| 0.6500                       | 0.103  | 0.051  | 0.025  | -0.003 | -0.012 | -0.017 | -0.023 | -0.010 | 0.019  | 0.012  | -0.006 | -0.024 | -0.033 | -0.018 | 0.000  | 0.063 | 0.6500                |
| 0.7500                       | 0.124  | 0.067  | 0.041  | 0.011  | 0.000  | -0.006 | -0.010 | 0.001  | 0.011  | 0.003  | -0.007 | -0.026 | -0.035 | -0.020 | -0.005 | 0.060 | 0.7500                |
| 0.8500                       | 0.103  | 0.049  | 0.024  | -0.005 | -0.015 | -0.021 | -0.027 | -0.011 | 0.013  | 0.013  | -0.011 | -0.028 | -0.068 | -0.017 | -0.001 | 0.064 | 0.8500                |
| 0.9500                       | 0.058  | 0.013  | -0.006 | -0.042 | -0.041 | -0.049 | -0.052 | -0.034 | 0.080  | 0.036  | -0.009 | -0.034 | -0.043 | -0.011 | 0.002  | 0.059 | 0.9500                |
| M = 0.701 $Q = 07.66$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | -0.039 | -0.068 | -0.091 | -0.105 | -0.109 | -0.114 | -0.122 | -0.110 | -0.262 | -0.132 | -0.302 | -0.231 | -0.182 | -0.041 | -0.015 | 0.040 | 0.0500                |
| 0.1500                       | -0.039 | -0.060 | -0.080 | -0.083 | -0.085 | -0.086 | -0.089 | -0.094 | -0.164 | -0.226 | -0.266 | -0.226 | -0.184 | -0.078 | -0.032 | 0.039 | 0.1500                |
| 0.2500                       | -0.028 | -0.047 | -0.063 | -0.067 | -0.068 | -0.069 | -0.076 | -0.083 | -0.127 | -0.193 | -0.222 | -0.196 | -0.162 | -0.071 | -0.029 | 0.051 | 0.2500                |
| 0.3500                       | -0.038 | -0.061 | -0.077 | -0.088 | -0.087 | -0.084 | -0.090 | -0.097 | -0.159 | -0.229 | -0.262 | -0.228 | -0.186 | -0.081 | -0.032 | 0.038 | 0.3500                |
| 0.4500                       | -0.037 | -0.066 | -0.089 | -0.108 | -0.113 | -0.114 | -0.119 | -0.112 | -0.285 | -0.316 | -0.292 | -0.232 | -0.183 | -0.049 | -0.013 | 0.033 | 0.4500                |
| 0.5500                       | 0.030  | 0.003  | -0.044 | -0.069 | -0.075 | -0.083 | -0.089 | -0.067 | 0.154  | 0.135  | 0.070  | 0.037  | 0.010  | -0.008 | -0.007 | 0.053 | 0.5500                |
| 0.6500                       | 0.132  | 0.072  | 0.044  | 0.013  | 0.001  | -0.008 | -0.011 | 0.009  | 0.063  | 0.079  | 0.071  | 0.040  | 0.009  | -0.007 | -0.001 | 0.060 | 0.6500                |
| 0.7500                       | 0.188  | 0.120  | 0.093  | 0.055  | 0.041  | 0.033  | 0.027  | 0.045  | 0.071  | 0.075  | 0.068  | 0.036  | 0.008  | -0.006 | -0.001 | 0.070 | 0.7500                |
| 0.8500                       | 0.138  | 0.074  | 0.048  | 0.012  | -0.010 | -0.016 | 0.009  | 0.051  | 0.051  | 0.079  | 0.063  | 0.036  | 0.004  | -0.007 | -0.002 | 0.060 | 0.8500                |
| 0.9500                       | 0.030  | -0.018 | -0.037 | -0.074 | -0.078 | -0.086 | -0.090 | -0.072 | 0.143  | 0.135  | 0.066  | 0.022  | 0.000  | -0.009 | -0.004 | 0.053 | 0.9500                |
| M = 0.697 $Q = 11.79$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | -0.119 | -0.144 | -0.165 | -0.177 | -0.178 | -0.182 | -0.190 | -0.183 | -0.458 | -0.213 | -0.392 | -0.227 | -0.149 | -0.093 | -0.068 | 0.007 | 0.0500                |
| 0.1500                       | -0.081 | -0.100 | -0.103 | -0.102 | -0.101 | -0.100 | -0.106 | -0.123 | -0.231 | -0.334 | -0.358 | -0.261 | -0.209 | -0.137 | -0.083 | 0.010 | 0.1500                |
| 0.2500                       | -0.048 | -0.051 | -0.068 | -0.068 | -0.068 | -0.065 | -0.074 | -0.090 | -0.165 | -0.255 | -0.278 | -0.186 | -0.143 | -0.115 | -0.073 | 0.026 | 0.2500                |
| 0.3500                       | -0.090 | -0.090 | -0.101 | -0.103 | -0.101 | -0.097 | -0.106 | -0.124 | -0.231 | -0.340 | -0.353 | -0.266 | -0.211 | -0.136 | -0.079 | 0.009 | 0.3500                |
| 0.4500                       | -0.118 | -0.144 | -0.163 | -0.178 | -0.182 | -0.183 | -0.188 | -0.187 | -0.473 | -0.469 | -0.379 | -0.229 | -0.147 | -0.094 | -0.061 | 0.012 | 0.4500                |
| 0.5500                       | -0.020 | -0.050 | -0.098 | -0.126 | -0.131 | -0.138 | -0.144 | -0.120 | 0.228  | 0.241  | 0.155  | 0.094  | 0.034  | -0.043 | -0.041 | 0.032 | 0.5500                |
| 0.6500                       | 0.171  | 0.104  | 0.073  | 0.037  | 0.023  | 0.015  | 0.011  | 0.064  | 0.112  | 0.160  | 0.157  | 0.105  | 0.040  | -0.027 | -0.029 | 0.041 | 0.6500                |
| 0.7500                       | 0.275  | 0.198  | 0.167  | 0.125  | 0.108  | 0.100  | 0.095  | 0.115  | 0.148  | 0.168  | 0.156  | 0.101  | 0.040  | -0.018 | -0.026 | 0.070 | 0.7500                |
| 0.8500                       | 0.183  | 0.109  | 0.081  | 0.038  | 0.024  | 0.014  | 0.008  | 0.033  | 0.105  | 0.155  | 0.148  | 0.099  | 0.064  | -0.027 | -0.035 | 0.038 | 0.8500                |
| 0.9500                       | -0.015 | -0.066 | -0.086 | -0.129 | -0.132 | -0.139 | -0.144 | -0.125 | 0.209  | 0.241  | 0.149  | 0.083  | 0.023  | -0.045 | -0.040 | 0.031 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(a) BVW - Continued

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| $\frac{\theta}{2\pi}$       | Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | $\frac{\theta}{2\pi}$ |
|-----------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
|                             | 0.050                        | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  |                       |
|                             | $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| $M = 0.701 \quad Q = 15.76$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | -0.235                       | -0.259 | -0.285 | -0.289 | -0.286 | -0.284 | -0.289 | -0.287 | -0.682 | -0.326 | -0.521 | -0.260 | -0.317 | -0.159 | -0.102 | -0.014 | 0.0500                |
| 0.1500                      | -0.177                       | -0.140 | -0.135 | -0.142 | -0.135 | -0.140 | -0.150 | -0.177 | 0.000  | -0.455 | -0.463 | -0.357 | -0.384 | -0.218 | -0.162 | -0.046 | 0.1500                |
| 0.2500                      | -0.081                       | -0.078 | -0.094 | -0.091 | -0.088 | -0.084 | -0.091 | -0.123 | -0.235 | -0.346 | -0.319 | -0.196 | -0.241 | -0.215 | -0.161 | -0.045 | 0.2500                |
| 0.3500                      | -0.193                       | -0.126 | -0.145 | -0.139 | -0.136 | -0.138 | -0.151 | -0.178 | -0.329 | -0.461 | -0.451 | -0.356 | -0.381 | -0.224 | -0.159 | -0.049 | 0.3500                |
| 0.4500                      | -0.232                       | -0.260 | -0.280 | -0.290 | -0.290 | -0.284 | -0.286 | -0.288 | -0.694 | -0.678 | -0.511 | -0.252 | -0.318 | -0.170 | -0.101 | -0.014 | 0.4500                |
| 0.5500                      | -0.115                       | -0.145 | -0.196 | -0.224 | -0.229 | -0.236 | -0.240 | -0.212 | 0.275  | 0.325  | 0.237  | 0.153  | 0.066  | -0.072 | -0.085 | 0.001  | 0.5500                |
| 0.6500                      | 0.183                        | 0.108  | 0.077  | 0.040  | 0.023  | 0.015  | 0.014  | 0.042  | 0.144  | 0.219  | 0.224  | 0.159  | 0.071  | -0.048 | -0.068 | 0.009  | 0.6500                |
| 0.7500                      | 0.344                        | 0.259  | 0.227  | 0.182  | 0.163  | 0.154  | 0.151  | 0.177  | 0.223  | 0.247  | 0.230  | 0.160  | 0.073  | -0.030 | -0.055 |        | 0.7500                |
| 0.8500                      | 0.200                        | 0.118  | 0.088  | 0.044  | 0.028  | 0.016  | 0.012  | 0.042  | 0.129  | 0.212  | 0.216  | 0.156  | 0.066  | -0.045 | -0.071 | 0.008  | 0.8500                |
| 0.9500                      | -0.105                       | -0.159 | -0.182 | -0.225 | -0.229 | -0.236 | -0.240 | -0.219 | 0.258  | 0.323  | 0.235  | 0.137  | 0.053  | -0.069 | -0.083 | 0.002  | 0.9500                |
| $M = 0.904 \quad Q = 03.78$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | 0.030                        | -0.011 | -0.041 | -0.067 | -0.070 | -0.076 | -0.084 | -0.056 | -0.090 | -0.052 | -0.237 | -0.232 | -0.217 | -0.048 | -0.011 | 0.062  | 0.0500                |
| 0.1500                      | 0.016                        | -0.019 | -0.049 | -0.067 | -0.071 | -0.075 | -0.078 | -0.056 | -0.079 | -0.140 | -0.204 | -0.221 | -0.198 | -0.077 | -0.019 | 0.060  | 0.1500                |
| 0.2500                      | 0.016                        | -0.023 | -0.052 | -0.066 | -0.070 | -0.071 | -0.075 | -0.059 | -0.072 | -0.130 | -0.187 | -0.213 | -0.190 | -0.082 | -0.023 | 0.062  | 0.2500                |
| 0.3500                      | 0.017                        | -0.024 | -0.047 | -0.066 | -0.076 | -0.073 | -0.079 | -0.061 | -0.078 | -0.145 | -0.193 | -0.223 | -0.193 | -0.078 | -0.019 | 0.060  | 0.3500                |
| 0.4500                      | 0.030                        | -0.014 | -0.044 | -0.067 | -0.074 | -0.078 | -0.083 | -0.059 | -0.098 | -0.175 | -0.207 | -0.234 | -0.206 | -0.048 | -0.006 | 0.063  | 0.4500                |
| 0.5500                      | 0.066                        | 0.037  | -0.018 | -0.048 | -0.054 | -0.062 | -0.069 | -0.045 | 0.091  | 0.023  | -0.060 | -0.059 | -0.058 | -0.025 | -0.005 | 0.067  | 0.5500                |
| 0.6500                      | 0.106                        | 0.047  | 0.015  | -0.018 | -0.030 | -0.064 | -0.043 | 0.026  | 0.022  | 0.002  | -0.030 | -0.057 | -0.061 | -0.033 | -0.008 | 0.074  | 0.6500                |
| 0.7500                      | 0.127                        | 0.062  | 0.032  | -0.004 | -0.018 | -0.025 | -0.034 | -0.020 | 0.011  | -0.006 | -0.032 | -0.058 | -0.062 | -0.033 | -0.012 |        | 0.7500                |
| 0.8500                      | 0.107                        | 0.045  | 0.017  | -0.019 | -0.032 | -0.038 | -0.047 | -0.026 | 0.014  | 0.003  | -0.035 | -0.059 | -0.067 | -0.031 | -0.008 | 0.074  | 0.8500                |
| 0.9500                      | 0.064                        | 0.011  | -0.013 | -0.054 | -0.058 | -0.063 | -0.069 | -0.050 | 0.086  | 0.022  | -0.035 | -0.068 | -0.072 | -0.023 | -0.006 | 0.067  | 0.9500                |
| $M = 0.951 \quad Q = 03.87$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | 0.043                        | -0.005 | -0.036 | -0.069 | -0.075 | -0.080 | -0.093 | -0.049 | -0.063 | -0.052 | -0.241 | -0.253 | -0.249 | -0.094 | 0.017  | 0.082  | 0.0500                |
| 0.1500                      | 0.028                        | -0.012 | -0.046 | -0.070 | -0.074 | -0.078 | -0.085 | -0.046 | -0.056 | -0.127 | -0.205 | -0.244 | -0.249 | -0.154 | 0.019  | 0.087  | 0.1500                |
| 0.2500                      | 0.027                        | -0.016 | -0.050 | -0.068 | -0.073 | -0.074 | -0.081 | -0.045 | -0.050 | -0.115 | -0.187 | -0.237 | -0.256 | -0.183 | 0.020  | 0.093  | 0.2500                |
| 0.3500                      | 0.028                        | -0.016 | -0.044 | -0.068 | -0.078 | -0.075 | -0.083 | -0.050 | -0.053 | -0.124 | -0.197 | -0.250 | -0.245 | -0.165 | 0.021  | 0.088  | 0.3500                |
| 0.4500                      | 0.042                        | -0.005 | -0.042 | -0.069 | -0.078 | -0.080 | -0.089 | -0.052 | -0.071 | -0.146 | -0.211 | -0.268 | -0.235 | -0.101 | 0.023  | 0.089  | 0.4500                |
| 0.5500                      | 0.079                        | 0.047  | -0.015 | -0.051 | -0.058 | -0.064 | -0.078 | -0.042 | 0.115  | 0.030  | -0.034 | -0.082 | -0.088 | -0.053 | 0.017  | 0.094  | 0.5500                |
| 0.6500                      | 0.117                        | 0.054  | 0.019  | -0.019 | -0.033 | -0.039 | -0.054 | -0.024 | 0.039  | 0.014  | -0.033 | -0.076 | -0.092 | -0.050 | 0.010  | 0.099  | 0.6500                |
| 0.7500                      | 0.139                        | 0.070  | 0.037  | -0.005 | -0.021 | -0.028 | -0.043 | -0.018 | 0.031  | 0.005  | -0.033 | -0.077 | -0.094 | -0.047 | 0.002  |        | 0.7500                |
| 0.8500                      | 0.121                        | 0.053  | 0.021  | -0.021 | -0.035 | -0.041 | -0.057 | -0.022 | 0.033  | 0.013  | -0.037 | -0.078 | -0.100 | -0.043 | 0.009  | 0.099  | 0.8500                |
| 0.9500                      | 0.076                        | 0.019  | -0.010 | -0.056 | -0.062 | -0.067 | -0.079 | -0.047 | 0.105  | 0.031  | -0.038 | -0.087 | -0.106 | -0.042 | 0.018  | 0.094  | 0.9500                |
| $M = 1.011 \quad Q = 03.98$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | 0.108                        | 0.056  | 0.015  | -0.031 | -0.057 | -0.064 | -0.085 | -0.078 | -0.034 | -0.059 | -0.168 | -0.176 | -0.222 | -0.262 | -0.177 | -0.030 | 0.0500                |
| 0.1500                      | 0.095                        | 0.047  | 0.005  | -0.032 | -0.058 | -0.063 | -0.079 | -0.072 | -0.033 | -0.089 | -0.142 | -0.165 | -0.225 | -0.298 | -0.205 | -0.015 | 0.1500                |
| 0.2500                      | 0.092                        | 0.044  | 0.000  | -0.031 | -0.056 | -0.060 | -0.076 | -0.070 | -0.027 | -0.078 | -0.121 | -0.162 | -0.223 | -0.290 | -0.231 | -0.008 | 0.2500                |
| 0.3500                      | 0.094                        | 0.044  | 0.005  | -0.030 | -0.062 | -0.061 | -0.078 | -0.077 | -0.030 | -0.089 | -0.136 | -0.174 | -0.221 | -0.307 | -0.205 | -0.012 | 0.3500                |
| 0.4500                      | 0.109                        | 0.055  | 0.009  | -0.030 | -0.061 | -0.065 | -0.083 | -0.082 | -0.049 | -0.115 | -0.151 | -0.187 | -0.212 | -0.284 | -0.174 | -0.019 | 0.4500                |
| 0.5500                      | 0.143                        | 0.105  | 0.034  | -0.011 | -0.038 | -0.048 | -0.069 | -0.073 | 0.130  | 0.070  | -0.024 | -0.018 | -0.069 | -0.147 | -0.162 | -0.019 | 0.5500                |
| 0.6500                      | 0.182                        | 0.112  | 0.069  | 0.023  | -0.011 | -0.024 | -0.044 | -0.048 | 0.068  | 0.052  | 0.025  | -0.017 | -0.069 | -0.110 | -0.161 | -0.024 | 0.6500                |
| 0.7500                      | 0.201                        | 0.127  | 0.087  | 0.036  | 0.001  | -0.013 | -0.033 | -0.040 | 0.002  | 0.046  | 0.025  | -0.016 | -0.066 | -0.099 | -0.160 |        | 0.7500                |
| 0.8500                      | 0.184                        | 0.111  | 0.072  | 0.022  | -0.014 | -0.027 | -0.046 | -0.046 | 0.036  | 0.053  | 0.020  | -0.018 | -0.074 | -0.108 | -0.157 | -0.027 | 0.8500                |
| 0.9500                      | 0.141                        | 0.078  | 0.042  | -0.016 | -0.042 | -0.051 | -0.070 | -0.075 | 0.123  | 0.067  | 0.020  | -0.029 | -0.086 | -0.134 | -0.157 | -0.024 | 0.9500                |
| $M = 1.049 \quad Q = 03.98$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | 0.077                        | 0.029  | 0.015  | 0.003  | -0.006 | 0.009  | 0.005  | -0.008 | -0.005 | -0.106 | -0.158 | -0.173 | -0.221 | -0.223 | -0.142 | -0.018 | 0.0500                |
| 0.1500                      | 0.065                        | 0.022  | 0.007  | 0.004  | -0.002 | 0.006  | 0.002  | -0.008 | -0.005 | -0.076 | -0.133 | -0.164 | -0.215 | -0.261 | -0.168 | -0.009 | 0.1500                |
| 0.2500                      | 0.063                        | 0.019  | 0.003  | 0.007  | 0.000  | 0.009  |        | -0.007 | -0.004 | -0.066 | -0.115 | -0.160 | -0.212 | -0.250 | -0.198 | -0.002 | 0.2500                |
| 0.3500                      | 0.065                        | 0.019  | 0.008  | 0.005  | -0.007 | 0.012  | -0.003 | -0.012 | -0.004 | -0.077 | -0.127 | -0.169 | -0.214 | -0.273 | -0.173 | -0.003 | 0.3500                |
| 0.4500                      | 0.079                        | 0.033  | 0.009  | 0.001  | -0.007 | 0.013  | -0.002 | -0.013 | -0.019 | -0.106 | -0.147 | -0.183 | -0.209 | -0.248 | -0.146 | -0.011 | 0.4500                |
| 0.5500                      | 0.116                        | 0.083  | 0.034  | 0.017  | 0.009  | 0.029  | 0.023  | 0.002  | 0.162  | 0.080  | 0.003  | -0.026 | -0.050 | -0.094 | -0.129 | -0.014 | 0.5500                |
| 0.6500                      | 0.155                        | 0.088  | 0.066  | 0.044  | 0.025  | 0.049  | 0.056  | 0.033  | 0.074  | 0.061  | 0.006  | -0.021 | -0.048 | -0.051 | -0.116 | -0.031 | 0.6500                |
| 0.7500                      | 0.176                        | 0.104  | 0.083  | 0.052  | 0.033  | 0.056  | 0.071  | 0.048  | 0.035  | 0.052  | 0.005  | -0.019 | -0.047 | -0.038 | -0.114 |        | 0.7500                |
| 0.8500                      | 0.157                        | 0.086  | 0.067  | 0.043  | 0.021  | 0.043  | 0.056  | 0.036  | 0.061  | 0.062  | 0.000  | -0.019 | -0.055 | -0.047 | -0.115 | -0.030 | 0.8500                |
| 0.9500                      | 0.111                        | 0.052  | 0.039  | 0.011  | 0.001  | 0.021  | 0.029  | 0.002  | 0.148  | 0.077  | 0.001  | -0.027 | -0.069 | -0.076 | -0.120 | -0.015 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(a) BVW - Continued

| Fraction of body length, x/l |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050 | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$ | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 1.103 $\alpha = 03.98$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.102 | 0.039  | 0.023  | -0.001 | -0.010 | -0.008 | -0.038 | -0.039 | 0.004  | -0.148 | -0.057 | -0.137 | -0.184 | -0.193 | -0.101 | 0.043  | 0.0500                |
| 0.1500                       | 0.088 | 0.028  | 0.013  | -0.003 | -0.006 | -0.007 | -0.035 | -0.037 | 0.009  | -0.009 | -0.043 | -0.127 | -0.170 | -0.197 | -0.139 | 0.041  | 0.1500                |
| 0.2500                       | 0.086 | 0.025  | 0.009  | 0.000  | -0.003 | -0.006 | -0.031 | -0.031 | 0.009  | -0.001 | -0.033 | -0.123 | -0.167 | -0.181 | -0.175 | 0.042  | 0.2500                |
| 0.3500                       | 0.088 | 0.026  | 0.013  | -0.002 | -0.010 | -0.008 | -0.033 | -0.036 | 0.015  | -0.011 | -0.049 | -0.130 | -0.170 | -0.207 | -0.139 | 0.043  | 0.3500                |
| 0.4500                       | 0.102 | 0.033  | 0.015  | -0.003 | -0.012 | -0.015 | -0.035 | -0.039 | 0.005  | -0.036 | -0.071 | -0.142 | -0.173 | -0.214 | -0.100 | 0.044  | 0.4500                |
| 0.5500                       | 0.138 | 0.087  | 0.041  | 0.019  | 0.004  | -0.003 | -0.019 | -0.027 | 0.155  | 0.106  | 0.112  | 0.027  | -0.001 | -0.078 | -0.085 | 0.056  | 0.5500                |
| 0.6500                       | 0.177 | 0.096  | 0.076  | 0.049  | 0.024  | 0.017  | 0.004  | 0.028  | 0.096  | 0.118  | 0.032  | -0.002 | -0.047 | -0.077 | -0.042 | 0.7500 |                       |
| 0.7500                       | 0.195 | 0.112  | 0.095  | 0.057  | 0.034  | 0.026  | 0.013  | 0.005  | -0.004 | 0.097  | 0.123  | 0.035  | -0.002 | -0.045 | -0.072 | 0.7500 |                       |
| 0.8500                       | 0.178 | 0.096  | 0.079  | 0.044  | 0.022  | 0.016  | 0.000  | 0.000  | 0.011  | 0.096  | 0.118  | 0.033  | -0.004 | -0.059 | -0.071 | 0.046  | 0.8500                |
| 0.9500                       | 0.134 | 0.061  | 0.048  | 0.012  | 0.001  | -0.002 | -0.021 | -0.032 | 0.131  | 0.102  | 0.115  | 0.023  | -0.018 | -0.077 | -0.078 | 0.060  | 0.9500                |
| M = 1.302 $\alpha = -04.18$  |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.115 | 0.070  | 0.048  | 0.024  | 0.007  | -0.004 | -0.018 | -0.005 | 0.124  | -0.088 | 0.049  | 0.016  | -0.015 | -0.023 | -0.051 | -0.034 | 0.0500                |
| 0.1500                       | 0.151 | 0.100  | 0.070  | 0.048  | 0.030  | 0.019  | -0.001 | 0.003  | -0.010 | 0.048  | 0.043  | 0.019  | -0.010 | 0.009  | -0.040 | -0.051 | 0.1500                |
| 0.2500                       | 0.172 | 0.113  | 0.082  | 0.056  | 0.041  | 0.029  | 0.010  | 0.008  | -0.001 | 0.018  | 0.040  | 0.017  | -0.010 | 0.026  | -0.060 | -0.060 | 0.2500                |
| 0.3500                       | 0.160 | 0.098  | 0.071  | 0.045  | 0.034  | 0.019  | 0.001  | 0.001  | 0.004  | 0.049  | 0.043  | 0.020  | -0.014 | -0.005 | -0.041 | -0.054 | 0.3500                |
| 0.4500                       | 0.127 | 0.069  | 0.043  | 0.019  | 0.010  | 0.002  | -0.016 | -0.017 | 0.125  | 0.075  | 0.040  | 0.017  | -0.020 | -0.043 | -0.051 | -0.042 | 0.4500                |
| 0.5500                       | 0.095 | 0.075  | 0.025  | 0.019  | -0.007 | -0.022 | -0.023 | -0.022 | 0.005  | -0.086 | -0.091 | -0.114 | -0.133 | -0.118 | -0.069 | -0.031 | 0.5500                |
| 0.6500                       | 0.080 | 0.030  | 0.018  | 0.004  | -0.010 | -0.016 | -0.016 | -0.031 | -0.017 | -0.032 | -0.071 | -0.107 | -0.124 | -0.133 | -0.094 | -0.011 | 0.6500                |
| 0.7500                       | 0.081 | 0.030  | 0.017  | 0.003  | -0.013 | -0.012 | -0.013 | -0.022 | -0.025 | -0.018 | -0.058 | -0.098 | -0.120 | -0.134 | -0.115 | -0.042 | 0.7500                |
| 0.8500                       | 0.085 | 0.033  | 0.018  | 0.005  | -0.017 | -0.015 | -0.015 | -0.017 | -0.019 | -0.035 | -0.068 | -0.106 | -0.129 | -0.139 | -0.090 | -0.005 | 0.8500                |
| 0.9500                       | 0.092 | 0.039  | 0.024  | 0.011  | -0.010 | -0.015 | -0.021 | -0.023 | -0.010 | -0.076 | -0.093 | -0.131 | -0.144 | -0.124 | -0.067 | -0.017 | 0.9500                |
| M = 1.302 $\alpha = -00.15$  |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.118 | 0.080  | 0.054  | 0.032  | 0.017  | 0.011  | -0.006 | 0.004  | 0.077  | -0.137 | -0.018 | -0.047 | -0.078 | -0.075 | -0.066 | -0.033 | 0.0500                |
| 0.1500                       | 0.125 | 0.073  | 0.055  | 0.030  | 0.021  | 0.011  | -0.007 | -0.003 | 0.000  | 0.009  | -0.017 | -0.037 | -0.070 | -0.058 | -0.076 | -0.053 | 0.1500                |
| 0.2500                       | 0.129 | 0.070  | 0.054  | 0.029  | 0.022  | 0.010  | -0.004 | -0.006 | -0.009 | 0.012  | -0.010 | -0.037 | -0.070 | -0.044 | -0.084 | -0.062 | 0.2500                |
| 0.3500                       | 0.127 | 0.070  | 0.054  | 0.031  | 0.019  | 0.012  | -0.001 | -0.008 | 0.002  | 0.012  | -0.016 | -0.037 | -0.072 | -0.065 | -0.080 | -0.055 | 0.3500                |
| 0.4500                       | 0.128 | 0.071  | 0.052  | 0.032  | 0.021  | 0.010  | -0.008 | -0.004 | 0.087  | 0.006  | -0.028 | -0.043 | -0.085 | -0.102 | -0.065 | -0.041 | 0.4500                |
| 0.5500                       | 0.129 | 0.105  | 0.055  | 0.029  | 0.022  | 0.017  | -0.004 | -0.002 | 0.052  | 0.068  | -0.015 | -0.047 | -0.068 | -0.064 | -0.057 | -0.047 | 0.5500                |
| 0.6500                       | 0.125 | 0.074  | 0.055  | 0.029  | 0.017  | 0.014  | 0.002  | -0.001 | 0.003  | 0.018  | -0.007 | -0.039 | -0.061 | -0.067 | -0.078 | -0.051 | 0.6500                |
| 0.7500                       | 0.121 | 0.077  | 0.057  | 0.031  | 0.017  | 0.011  | 0.000  | -0.006 | -0.010 | 0.004  | 0.005  | -0.039 | -0.061 | -0.075 | -0.084 | -0.051 | 0.7500                |
| 0.8500                       | 0.119 | 0.079  | 0.056  | 0.032  | 0.019  | 0.007  | -0.002 | -0.003 | -0.007 | 0.019  | -0.003 | -0.046 | -0.063 | -0.077 | -0.073 | -0.044 | 0.8500                |
| 0.9500                       | 0.115 | 0.080  | 0.055  | 0.035  | 0.017  | 0.006  | -0.001 | 0.005  | 0.066  | 0.005  | -0.020 | -0.059 | -0.080 | -0.072 | -0.063 | -0.032 | 0.9500                |
| M = 1.303 $\alpha = 03.88$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.097 | 0.043  | 0.031  | 0.007  | -0.003 | -0.009 | -0.027 | -0.019 | 0.006  | -0.190 | -0.086 | -0.113 | -0.140 | -0.143 | -0.091 | -0.055 | 0.0500                |
| 0.1500                       | 0.087 | 0.034  | 0.021  | 0.006  | -0.004 | -0.016 | -0.018 | -0.015 | -0.017 | -0.038 | -0.074 | -0.096 | -0.129 | -0.129 | -0.115 | -0.058 | 0.1500                |
| 0.2500                       | 0.084 | 0.033  | 0.019  | 0.009  | -0.003 | -0.013 | -0.011 | -0.017 | -0.020 | -0.018 | -0.062 | -0.091 | -0.124 | -0.105 | -0.142 | -0.077 | 0.2500                |
| 0.3500                       | 0.086 | 0.035  | 0.018  | 0.006  | -0.007 | -0.013 | -0.013 | -0.026 | -0.009 | -0.035 | -0.073 | -0.095 | -0.130 | -0.137 | -0.119 | -0.056 | 0.3500                |
| 0.4500                       | 0.102 | 0.045  | 0.027  | 0.008  | -0.003 | -0.016 | -0.023 | -0.027 | 0.006  | -0.071 | -0.094 | -0.108 | -0.150 | -0.161 | -0.086 | -0.054 | 0.4500                |
| 0.5500                       | 0.134 | 0.102  | 0.057  | 0.028  | 0.013  | 0.004  | -0.019 | -0.016 | 0.128  | 0.077  | 0.049  | 0.023  | -0.003 | -0.014 | -0.075 | -0.060 | 0.5500                |
| 0.6500                       | 0.167 | 0.095  | 0.085  | 0.050  | 0.036  | 0.032  | -0.006 | 0.005  | 0.002  | 0.049  | 0.052  | 0.022  | 0.003  | -0.006 | -0.057 | -0.071 | 0.6500                |
| 0.7500                       | 0.181 | 0.109  | 0.100  | 0.062  | 0.045  | 0.036  | 0.018  | 0.017  | 0.009  | 0.023  | 0.057  | 0.020  | -0.001 | -0.014 | -0.040 | -0.040 | 0.7500                |
| 0.8500                       | 0.165 | 0.095  | 0.086  | 0.049  | 0.032  | 0.022  | 0.010  | 0.008  | -0.002 | 0.058  | 0.053  | 0.017  | -0.004 | -0.017 | -0.050 | -0.065 | 0.8500                |
| 0.9500                       | 0.126 | 0.064  | 0.059  | 0.026  | 0.010  | 0.003  | -0.010 | -0.011 | 0.116  | 0.074  | 0.046  | 0.007  | -0.014 | -0.019 | -0.070 | -0.054 | 0.9500                |
| M = 1.302 $\alpha = 07.91$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.045 | -0.005 | -0.015 | -0.039 | -0.051 | -0.061 | -0.069 | -0.073 | -0.078 | -0.242 | -0.154 | -0.179 | -0.201 | -0.172 | -0.105 | -0.074 | 0.0500                |
| 0.1500                       | 0.039 | -0.003 | -0.011 | -0.020 | -0.040 | -0.032 | -0.041 | -0.043 | -0.035 | -0.080 | -0.134 | -0.169 | -0.195 | -0.180 | -0.139 | -0.064 | 0.1500                |
| 0.2500                       | 0.047 | 0.003  | -0.002 | -0.010 | -0.026 | -0.015 | -0.027 | -0.025 | -0.023 | -0.046 | -0.115 | -0.147 | -0.175 | -0.124 | -0.174 | -0.127 | 0.2500                |
| 0.3500                       | 0.041 | -0.007 | -0.014 | -0.027 | -0.044 | -0.030 | -0.040 | -0.042 | -0.028 | -0.081 | -0.132 | -0.165 | -0.194 | -0.183 | -0.142 | -0.069 | 0.3500                |
| 0.4500                       | 0.052 | -0.011 | -0.025 | -0.037 | -0.061 | -0.061 | -0.070 | -0.075 | -0.079 | -0.159 | -0.151 | -0.170 | -0.207 | -0.185 | -0.107 | -0.084 | 0.4500                |
| 0.5500                       | 0.114 | 0.076  | 0.027  | 0.004  | -0.017 | -0.037 | -0.045 | -0.057 | 0.179  | 0.136  | 0.139  | 0.099  | 0.077  | 0.034  | -0.034 | -0.092 | 0.5500                |
| 0.6500                       | 0.202 | 0.124  | 0.108  | 0.069  | 0.053  | 0.039  | 0.015  | 0.012  | 0.002  | 0.101  | 0.123  | 0.099  | 0.075  | 0.060  | -0.010 | -0.086 | 0.6500                |
| 0.7500                       | 0.244 | 0.162  | 0.150  | 0.106  | 0.086  | 0.073  | 0.049  | 0.046  | 0.033  | 0.033  | 0.132  | 0.100  | 0.089  | 0.059  | 0.024  | -0.042 | 0.7500                |
| 0.8500                       | 0.205 | 0.122  | 0.113  | 0.066  | 0.049  | 0.038  | 0.015  | 0.018  | 0.001  | 0.103  | 0.134  | 0.096  | 0.080  | 0.051  | -0.009 | -0.076 | 0.8500                |
| 0.9500                       | 0.109 | 0.041  | 0.035  | -0.005 | -0.021 | -0.031 | -0.045 | -0.051 | 0.164  | 0.146  | 0.132  | 0.081  | 0.058  | 0.034  | -0.057 | -0.081 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(a) BVW - Continued

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| $\frac{\theta}{2\pi}$      | Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | $\frac{\theta}{2\pi}$ |
|----------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
|                            | 0.050                        | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  |                       |
|                            | $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 1.302 $\alpha = 11.89$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | -0.012                       | -0.058 | -0.076 | -0.098 | -0.116 | -0.114 | -0.122 | -0.132 | -0.157 | -0.275 | -0.194 | -0.216 | -0.241 | -0.121 | -0.100 | -0.059 | 0.0500                |
| 0.1500                     | 0.006                        | -0.038 | -0.045 | -0.041 | -0.045 | -0.045 | -0.051 | -0.055 | -0.050 | -0.118 | -0.186 | -0.236 | -0.273 | -0.154 | -0.118 | -0.064 | 0.1500                |
| 0.2500                     | 0.027                        | 0.007  | -0.007 | -0.011 | -0.018 | -0.019 | -0.024 | -0.025 | -0.008 | -0.053 | -0.136 | -0.179 | -0.209 | -0.218 | -0.126 | -0.118 | 0.2500                |
| 0.3500                     | 0.004                        | -0.036 | -0.050 | -0.043 | -0.047 | -0.045 | -0.051 | -0.054 | -0.049 | -0.123 | -0.183 | -0.226 | -0.274 | -0.153 | -0.119 | -0.069 | 0.3500                |
| 0.4500                     | -0.011                       | -0.056 | -0.081 | -0.102 | -0.116 | -0.119 | -0.126 | -0.128 | -0.162 | -0.224 | -0.190 | -0.214 | -0.253 | -0.124 | -0.101 | -0.065 | 0.4500                |
| 0.5500                     | 0.087                        | 0.058  | 0.003  | -0.045 | -0.058 | -0.073 | -0.090 | -0.099 | 0.221  | 0.247  | 0.234  | 0.202  | 0.189  | 0.121  | -0.046 | -0.077 | 0.5500                |
| 0.6500                     | 0.250                        | 0.171  | 0.151  | 0.099  | 0.078  | 0.067  | 0.041  | 0.031  | 0.023  | 0.134  | 0.237  | 0.205  | 0.186  | 0.159  | 0.035  | -0.056 | 0.6500                |
| 0.7500                     | 0.331                        | 0.245  | 0.225  | 0.174  | 0.151  | 0.132  | 0.109  | 0.101  | 0.084  | 0.066  | 0.231  | 0.200  | 0.179  | 0.157  | 0.083  | 0.035  | 0.7500                |
| 0.8500                     | 0.258                        | 0.174  | 0.153  | 0.096  | 0.080  | 0.063  | 0.038  | 0.033  | 0.016  | 0.123  | 0.229  | 0.202  | 0.181  | 0.148  | 0.039  | -0.042 | 0.8500                |
| 0.9500                     | 0.091                        | 0.024  | 0.003  | -0.044 | -0.058 | -0.077 | -0.087 | -0.103 | 0.189  | 0.248  | 0.227  | 0.186  | 0.167  | 0.129  | -0.039 | -0.068 | 0.9500                |
| M = 1.302 $\alpha = 15.87$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | -0.098                       | -0.151 | -0.183 | -0.201 | -0.210 | -0.215 | -0.222 | -0.203 | -0.241 | -0.327 | -0.271 | -0.278 | -0.290 | -0.170 | -0.082 | -0.015 | 0.0500                |
| 0.1500                     | -0.060                       | -0.124 | -0.073 | -0.069 | -0.078 | -0.077 | -0.088 | -0.090 | -0.078 | -0.161 | -0.252 | -0.310 | -0.363 | -0.045 | -0.061 | 0.000  | 0.1500                |
| 0.2500                     | 0.010                        | -0.022 | -0.016 | -0.028 | -0.042 | -0.037 | -0.040 | -0.036 | -0.039 | -0.076 | -0.161 | -0.196 | -0.239 | -0.268 | -0.136 | -0.079 | 0.2500                |
| 0.3500                     | -0.069                       | -0.130 | -0.079 | -0.070 | -0.076 | -0.075 | -0.083 | -0.091 | -0.079 | -0.166 | -0.257 | -0.309 | -0.367 | -0.035 | -0.053 | -0.026 | 0.3500                |
| 0.4500                     | -0.096                       | -0.153 | -0.187 | -0.199 | -0.214 | -0.212 | -0.214 | -0.200 | -0.248 | -0.290 | -0.271 | -0.277 | -0.308 | -0.171 | -0.079 | -0.020 | 0.4500                |
| 0.5500                     | 0.047                        | 0.003  | -0.062 | -0.109 | -0.135 | -0.150 | -0.169 | -0.181 | 0.163  | 0.305  | 0.317  | 0.302  | 0.266  | 0.195  | -0.015 | -0.074 | 0.5500                |
| 0.6500                     | 0.299                        | 0.207  | 0.180  | 0.122  | 0.099  | 0.079  | 0.059  | 0.044  | 0.025  | 0.137  | 0.328  | 0.312  | 0.270  | 0.249  | 0.098  | -0.038 | 0.6500                |
| 0.7500                     | 0.422                        | 0.325  | 0.299  | 0.246  | 0.215  | 0.193  | 0.171  | 0.160  | 0.134  | 0.112  | 0.328  | 0.313  | 0.272  | 0.266  | 0.158  | 0.035  | 0.7500                |
| 0.8500                     | 0.307                        | 0.213  | 0.187  | 0.125  | 0.105  | 0.082  | 0.063  | 0.046  | 0.025  | 0.130  | 0.325  | 0.315  | 0.268  | 0.253  | 0.099  | -0.028 | 0.8500                |
| 0.9500                     | 0.053                        | -0.027 | -0.056 | -0.108 | -0.131 | -0.148 | -0.169 | -0.186 | 0.139  | 0.308  | 0.308  | 0.296  | 0.247  | 0.213  | -0.010 | -0.072 | 0.9500                |
| M = 1.499 $\alpha = 03.83$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | 0.079                        | 0.037  | 0.022  | 0.005  | -0.002 | -0.013 | -0.023 | -0.031 | -0.007 | -0.160 | -0.066 | -0.100 | -0.122 | -0.117 | -0.081 | -0.073 | 0.0500                |
| 0.1500                     | 0.068                        | 0.024  | 0.012  | 0.001  | -0.005 | -0.012 | -0.027 | -0.026 | -0.026 | -0.029 | -0.059 | -0.091 | -0.111 | -0.103 | -0.107 | -0.076 | 0.1500                |
| 0.2500                     | 0.062                        | 0.021  | 0.009  | 0.002  | -0.003 | -0.009 | -0.026 | -0.025 | -0.026 | -0.019 | -0.053 | -0.089 | -0.100 | -0.120 | -0.110 | -0.096 | 0.2500                |
| 0.3500                     | 0.063                        | 0.022  | 0.009  | 0.000  | -0.006 | -0.010 | -0.025 | -0.025 | -0.023 | -0.030 | -0.060 | -0.092 | -0.108 | -0.106 | -0.102 | -0.076 | 0.3500                |
| 0.4500                     | 0.078                        | 0.032  | 0.018  | 0.005  | -0.008 | -0.007 | -0.022 | -0.030 | -0.016 | -0.077 | -0.074 | -0.099 | -0.114 | -0.133 | -0.073 | -0.073 | 0.4500                |
| 0.5500                     | 0.108                        | 0.091  | 0.047  | 0.021  | 0.010  | 0.007  | -0.006 | -0.017 | 0.098  | 0.066  | 0.027  | 0.020  | 0.005  | -0.003 | -0.053 | -0.068 | 0.5500                |
| 0.6500                     | 0.143                        | 0.080  | 0.074  | 0.040  | 0.028  | 0.028  | 0.012  | -0.001 | 0.003  | 0.040  | 0.038  | 0.023  | 0.005  | 0.001  | -0.031 | -0.059 | 0.6500                |
| 0.7500                     | 0.159                        | 0.096  | 0.086  | 0.055  | 0.037  | 0.033  | 0.017  | 0.007  | 0.008  | -0.004 | 0.051  | 0.030  | 0.013  | -0.009 | -0.028 | 0.035  | 0.7500                |
| 0.8500                     | 0.147                        | 0.085  | 0.074  | 0.044  | 0.028  | 0.023  | 0.012  | -0.001 | -0.007 | 0.041  | 0.042  | 0.026  | 0.006  | -0.019 | -0.038 | -0.056 | 0.8500                |
| 0.9500                     | 0.109                        | 0.058  | 0.046  | 0.022  | 0.008  | 0.004  | -0.005 | -0.021 | 0.085  | 0.065  | 0.028  | 0.005  | 0.004  | -0.019 | -0.053 | -0.071 | 0.9500                |
| M = 1.703 $\alpha = 03.78$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | 0.098                        | 0.056  | 0.038  | 0.021  | 0.010  | -0.003 | -0.019 | -0.025 | 0.008  | -0.122 | -0.080 | -0.090 | -0.108 | -0.098 | -0.067 | -0.077 | 0.0500                |
| 0.1500                     | 0.078                        | 0.046  | 0.029  | 0.017  | 0.004  | -0.002 | -0.016 | -0.017 | -0.006 | -0.028 | -0.051 | -0.081 | -0.098 | -0.113 | -0.096 | -0.076 | 0.1500                |
| 0.2500                     | 0.067                        | 0.044  | 0.028  | 0.009  | 0.003  | -0.004 | -0.011 | -0.003 | -0.008 | -0.028 | -0.042 | -0.076 | -0.094 | -0.113 | -0.106 | -0.080 | 0.2500                |
| 0.3500                     | 0.072                        | 0.043  | 0.034  | 0.012  | 0.007  | -0.008 | -0.018 | -0.015 | -0.002 | -0.028 | -0.050 | -0.079 | -0.100 | -0.113 | -0.094 | -0.076 | 0.3500                |
| 0.4500                     | 0.095                        | 0.051  | 0.040  | 0.018  | 0.007  | -0.008 | -0.018 | -0.026 | -0.048 | -0.080 | -0.086 | -0.109 | -0.104 | -0.061 | -0.074 | -0.074 | 0.4500                |
| 0.5500                     | 0.129                        | 0.128  | 0.060  | 0.041  | 0.024  | 0.009  | -0.003 | -0.012 | 0.075  | 0.064  | 0.036  | 0.018  | -0.002 | -0.009 | -0.046 | -0.065 | 0.5500                |
| 0.6500                     | 0.165                        | 0.118  | 0.084  | 0.057  | 0.046  | 0.036  | 0.020  | 0.013  | 0.001  | 0.023  | 0.036  | 0.021  | -0.005 | -0.008 | -0.023 | -0.053 | 0.6500                |
| 0.7500                     | 0.184                        | 0.128  | 0.107  | 0.064  | 0.055  | 0.041  | 0.036  | 0.024  | 0.011  | 0.001  | 0.053  | 0.029  | -0.004 | -0.016 | -0.024 | 0.035  | 0.7500                |
| 0.8500                     | 0.177                        | 0.109  | 0.089  | 0.051  | 0.053  | 0.064  | 0.023  | 0.013  | 0.010  | 0.022  | 0.034  | 0.023  | 0.002  | -0.016 | -0.031 | -0.052 | 0.8500                |
| 0.9500                     | 0.138                        | 0.078  | 0.057  | 0.036  | 0.031  | 0.012  | -0.010 | -0.013 | 0.068  | 0.071  | 0.034  | 0.019  | 0.006  | -0.025 | -0.046 | -0.068 | 0.9500                |
| M = 1.908 $\alpha = 03.93$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | 0.073                        | 0.041  | 0.026  | 0.012  | 0.009  | -0.006 | -0.010 | -0.009 | 0.007  | -0.105 | -0.065 | -0.069 | -0.090 | -0.087 | -0.050 | -0.059 | 0.0500                |
| 0.1500                     | 0.064                        | 0.030  | 0.017  | 0.007  | 0.002  | -0.001 | -0.005 | -0.003 | -0.009 | -0.015 | -0.045 | -0.059 | -0.084 | -0.092 | -0.070 | -0.063 | 0.1500                |
| 0.2500                     | 0.057                        | 0.026  | 0.020  | 0.003  | 0.001  | 0.007  | -0.003 | -0.004 | -0.003 | -0.012 | -0.031 | -0.055 | -0.080 | -0.086 | -0.095 | -0.067 | 0.2500                |
| 0.3500                     | 0.060                        | 0.026  | 0.021  | 0.004  | 0.002  | 0.001  | -0.007 | -0.007 | -0.009 | -0.014 | -0.045 | -0.063 | -0.085 | -0.091 | -0.071 | -0.063 | 0.3500                |
| 0.4500                     | 0.077                        | 0.035  | 0.031  | 0.009  | 0.003  | -0.003 | -0.007 | -0.011 | 0.002  | -0.053 | -0.065 | -0.068 | -0.089 | -0.094 | -0.048 | -0.059 | 0.4500                |
| 0.5500                     | 0.108                        | 0.117  | 0.055  | 0.030  | 0.021  | 0.011  | 0.005  | 0.001  | 0.080  | 0.074  | 0.043  | 0.021  | 0.006  | 0.007  | -0.036 | -0.050 | 0.5500                |
| 0.6500                     | 0.148                        | 0.093  | 0.075  | 0.053  | 0.035  | 0.034  | 0.030  | 0.024  | 0.023  | 0.027  | 0.043  | 0.026  | 0.010  | -0.003 | -0.016 | -0.043 | 0.6500                |
| 0.7500                     | 0.167                        | 0.115  | 0.085  | 0.064  | 0.049  | 0.040  | 0.048  | 0.038  | 0.031  | 0.018  | 0.045  | 0.025  | 0.014  | -0.017 | 0.035  | 0.035  | 0.7500                |
| 0.8500                     | 0.146                        | 0.099  | 0.071  | 0.051  | 0.035  | 0.031  | 0.036  | 0.018  | 0.013  | 0.026  | 0.042  | 0.025  | 0.011  | -0.002 | -0.026 | -0.043 | 0.8500                |
| 0.9500                     | 0.105                        | 0.062  | 0.048  | 0.024  | 0.015  | 0.011  | 0.009  | -0.003 | 0.067  | 0.080  | 0.050  | 0.020  | 0.010  | -0.005 | -0.037 | -0.052 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(a) BVW - Continued

| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
|                              | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 2.230 $\alpha = -03.73$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.103  | 0.060  | 0.050  | 0.033  | 0.029  | 0.019  | 0.008  | 0.002  | 0.044  | 0.080  | 0.020  | 0.010  |        | -0.003 | -0.009 | -0.021 | 0.0500                |
| 0.1500                       | 0.141  | 0.082  | 0.067  | 0.051  | 0.041  | 0.032  | 0.027  | 0.020  | 0.002  | 0.003  | 0.015  | 0.019  | 0.001  | -0.002 | -0.017 | -0.012 | 0.1500                |
| 0.2500                       | 0.143  | 0.090  | 0.076  | 0.058  | 0.048  | 0.040  | 0.033  | 0.025  | 0.012  | -0.004 | 0.014  | 0.019  | 0.003  | -0.001 | -0.015 | -0.019 | 0.2500                |
| 0.3500                       | 0.130  | 0.080  | 0.066  | 0.049  | 0.039  | 0.036  | 0.031  | 0.017  | 0.008  | -0.003 | 0.019  | 0.017  | 0.002  | -0.004 | -0.020 | -0.010 | 0.3500                |
| 0.4500                       | 0.104  | 0.063  | 0.048  | 0.032  | 0.023  | 0.020  | 0.009  | 0.001  | 0.039  | 0.047  | 0.019  | 0.016  | 0.003  | -0.012 | -0.008 | -0.019 | 0.4500                |
| 0.5500                       | 0.077  | 0.132  | 0.033  | 0.021  | 0.012  | 0.005  | -0.005 | -0.010 | 0.014  | -0.019 | -0.038 | -0.044 | -0.052 | -0.044 | -0.026 | -0.030 | 0.5500                |
| 0.6500                       | 0.065  | 0.032  | 0.025  | 0.013  | 0.006  | 0.003  | -0.006 | -0.005 | 0.002  |        | -0.020 | -0.033 | -0.044 | -0.047 | -0.054 | -0.043 | 0.6500                |
| 0.7500                       | 0.060  | 0.033  | 0.024  | 0.014  | 0.003  | 0.004  | -0.004 | -0.001 | -0.001 | -0.006 | -0.004 | -0.032 | -0.040 | -0.045 | -0.059 |        | 0.7500                |
| 0.8500                       | 0.064  | 0.035  | 0.024  | 0.015  | 0.005  | 0.000  | -0.002 | -0.004 | -0.004 | -0.006 | -0.019 | -0.032 | -0.044 | -0.054 | -0.055 | -0.039 | 0.8500                |
| 0.9500                       | 0.076  | 0.042  | 0.035  | 0.021  | 0.013  | 0.002  | -0.003 | -0.005 | 0.010  | -0.020 | -0.035 | -0.042 | -0.045 | -0.057 | -0.028 | -0.034 | 0.9500                |
| M = 2.237 $\alpha = 00.20$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.094  | 0.055  | 0.041  | 0.027  | 0.022  | 0.013  | 0.008  |        | 0.024  | 0.071  | -0.025 | -0.031 | -0.044 | -0.043 | -0.026 | -0.033 | 0.0500                |
| 0.1500                       | 0.102  | 0.051  | 0.039  | 0.025  | 0.018  | 0.012  | 0.008  | 0.004  | -0.009 | -0.006 | -0.020 | -0.021 | -0.039 | -0.040 | -0.051 | -0.036 | 0.1500                |
| 0.2500                       | 0.090  | 0.049  | 0.038  | 0.026  | 0.017  | 0.011  | 0.008  | 0.001  | -0.007 | -0.022 | -0.007 | -0.018 | -0.036 | -0.038 | -0.052 | -0.053 | 0.2500                |
| 0.3500                       | 0.091  | 0.050  | 0.038  | 0.027  | 0.017  | 0.015  | 0.012  | 0.004  | -0.004 | -0.011 | -0.015 | -0.022 | -0.039 | -0.042 | -0.054 | -0.035 | 0.3500                |
| 0.4500                       | 0.094  | 0.052  | 0.038  | 0.028  | 0.019  | 0.013  | 0.007  | 0.002  | 0.019  | -0.001 | -0.028 | -0.026 | -0.040 | -0.052 | -0.025 | -0.032 | 0.4500                |
| 0.5500                       | 0.097  | 0.138  | 0.044  | 0.029  | 0.021  | 0.015  | 0.006  | 0.001  | 0.026  | 0.021  | -0.004 | -0.023 | -0.028 | -0.025 | -0.028 | -0.034 | 0.5500                |
| 0.6500                       | 0.102  | 0.053  | 0.047  | 0.030  | 0.023  | 0.014  | 0.008  | -0.002 | -0.004 | 0.005  | -0.001 | -0.014 | -0.023 | -0.028 | -0.038 | -0.041 | 0.6500                |
| 0.7500                       | 0.105  | 0.053  | 0.048  | 0.031  | 0.023  | 0.013  | 0.008  | 0.000  | 0.002  | -0.008 | 0.012  | -0.011 | -0.020 | -0.025 | -0.038 |        | 0.7500                |
| 0.8500                       | 0.104  | 0.053  | 0.045  | 0.030  | 0.022  | 0.015  | 0.005  | 0.006  | -0.003 | 0.003  | 0.002  | -0.014 | -0.023 | -0.034 | -0.040 | -0.038 | 0.8500                |
| 0.9500                       | 0.098  | 0.054  | 0.043  | 0.032  | 0.018  | 0.014  | 0.007  | 0.002  | 0.028  | 0.019  | -0.013 | -0.024 | -0.023 | -0.037 | -0.029 | -0.032 | 0.9500                |
| M = 2.235 $\alpha = 04.18$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.075  | 0.034  | 0.023  | 0.010  | 0.004  | -0.004 | -0.012 | -0.013 | 0.071  | -0.067 | -0.065 | -0.077 | -0.071 | -0.041 | -0.046 | 0.0500 |                       |
| 0.1500                       | 0.067  | 0.024  | 0.015  | 0.007  | -0.005 | -0.011 | -0.014 | -0.024 | -0.025 | -0.049 | -0.045 | -0.073 | -0.073 | -0.074 | -0.052 | 0.1500 |                       |
| 0.2500                       | 0.052  | 0.023  | 0.016  | 0.009  | 0.002  | -0.002 | -0.007 | -0.013 | -0.021 | -0.028 | -0.032 | -0.047 | -0.068 | -0.068 | -0.082 | -0.075 | 0.2500                |
| 0.3500                       | 0.054  | 0.024  | 0.016  | 0.006  | -0.001 | -0.003 | -0.004 | -0.015 | -0.020 | -0.029 | -0.045 | -0.055 | -0.074 | -0.074 | -0.078 | -0.052 | 0.3500                |
| 0.4500                       | 0.071  | 0.034  | 0.024  | 0.008  | 0.003  | -0.005 | -0.009 | -0.016 | -0.016 | -0.055 | -0.069 | -0.059 | -0.074 | -0.081 | -0.040 | -0.045 | 0.4500                |
| 0.5500                       | 0.142  | 0.091  | 0.075  | 0.054  | 0.018  | 0.012  | 0.004  | -0.003 | 0.025  | 0.058  | 0.040  | 0.016  | 0.010  | 0.012  | -0.028 | -0.036 | 0.5500                |
| 0.6500                       | 0.159  | 0.105  | 0.090  | 0.068  | 0.051  | 0.035  | 0.024  | 0.013  | 0.002  | 0.008  | 0.035  | 0.024  | 0.014  | 0.010  | -0.005 | -0.026 | 0.6500                |
| 0.7500                       | 0.146  | 0.092  | 0.078  | 0.052  | 0.041  | 0.034  | 0.023  | 0.016  | 0.006  | 0.003  | 0.034  | 0.021  | 0.013  | 0.011  | -0.002 |        | 0.7500                |
| 0.8500                       | 0.146  | 0.092  | 0.078  | 0.052  | 0.041  | 0.034  | 0.023  | 0.016  | 0.006  | 0.003  | 0.034  | 0.021  | 0.013  | 0.011  | -0.002 |        | 0.7500                |
| 0.9500                       | 0.108  | 0.060  | 0.049  | 0.027  | 0.018  | 0.009  | 0.004  | -0.006 | 0.024  | 0.062  | 0.031  | 0.015  | 0.015  | 0.001  | -0.028 | -0.035 | 0.9500                |
| M = 2.234 $\alpha = 08.21$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.041  | -0.017 | -0.031 | -0.035 | -0.045 | -0.054 | -0.062 | -0.064 | -0.014 | -0.098 | -0.091 | -0.104 | -0.091 | -0.056 | -0.059 | 0.0500 |                       |
| 0.1500                       | 0.032  | -0.006 | -0.015 | -0.016 | -0.023 | -0.029 | -0.034 | -0.035 | -0.040 | -0.048 | -0.083 | -0.088 | -0.107 | -0.107 | -0.089 | -0.057 | 0.1500                |
| 0.2500                       | 0.023  | 0.003  | 0.001  | -0.005 | -0.012 | -0.018 | -0.021 | -0.026 | -0.030 | -0.036 | -0.053 | -0.071 | -0.093 | -0.094 | -0.108 | -0.108 | 0.2500                |
| 0.3500                       | 0.019  | -0.007 | -0.015 | -0.016 | -0.025 | -0.025 | -0.025 | -0.036 | -0.036 | -0.048 | -0.077 | -0.090 | -0.109 | -0.110 | -0.097 | -0.057 | 0.3500                |
| 0.4500                       | 0.039  | -0.003 | -0.017 | -0.033 | -0.037 | -0.046 | -0.049 | -0.060 | -0.068 | -0.110 | -0.099 | -0.086 | -0.102 | -0.102 | -0.054 | -0.059 | 0.4500                |
| 0.5500                       | 0.109  | 0.135  | 0.040  | 0.011  | -0.013 | -0.019 | -0.029 | -0.015 | 0.101  | 0.095  | 0.067  | 0.058  | 0.057  | 0.057  | -0.023 | -0.032 | 0.5500                |
| 0.6500                       | 0.200  | 0.128  | 0.113  | 0.076  | 0.064  | 0.053  | 0.043  | 0.032  | 0.014  | 0.016  | 0.082  | 0.069  | 0.063  | 0.055  | 0.040  | 0.002  | 0.6500                |
| 0.7500                       | 0.243  | 0.164  | 0.148  | 0.107  | 0.096  | 0.084  | 0.076  | 0.061  | 0.049  | 0.034  | 0.041  | 0.077  | 0.066  | 0.057  | 0.044  |        | 0.7500                |
| 0.8500                       | 0.207  | 0.130  | 0.115  | 0.077  | 0.066  | 0.052  | 0.046  | 0.033  | 0.019  | 0.012  | 0.078  | 0.068  | 0.064  | 0.051  | 0.038  | 0.004  | 0.8500                |
| 0.9500                       | 0.117  | 0.056  | 0.039  | 0.011  | -0.002 | -0.010 | -0.021 | -0.033 | -0.017 | 0.108  | 0.083  | 0.066  | 0.065  | 0.047  | -0.024 | -0.032 | 0.9500                |
| M = 2.233 $\alpha = 12.19$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.004 | -0.044 | -0.062 | -0.087 | -0.093 | -0.110 | -0.120 | -0.125 | -0.135 | -0.087 | -0.127 | -0.108 | -0.122 | -0.103 | -0.071 | -0.067 | 0.0500                |
| 0.1500                       | -0.002 | -0.035 | -0.042 | -0.036 | -0.042 | -0.047 | -0.049 | -0.052 | -0.059 | -0.076 | -0.108 | -0.109 | -0.135 | -0.131 | -0.093 | -0.095 | 0.1500                |
| 0.2500                       | 0.001  | -0.007 | -0.006 | -0.016 | -0.024 | -0.028 | -0.030 | -0.033 | -0.037 | -0.040 | -0.064 | -0.081 | -0.101 | -0.104 | -0.120 | -0.120 | 0.2500                |
| 0.3500                       | -0.013 | -0.037 | -0.043 | -0.043 | -0.044 | -0.043 | -0.044 | -0.053 | -0.052 | -0.076 | -0.103 | -0.114 | -0.135 | -0.131 | -0.104 | -0.053 | 0.3500                |
| 0.4500                       | -0.004 | -0.044 | -0.064 | -0.089 | -0.099 | -0.108 | -0.115 | -0.123 | -0.136 | -0.147 | -0.124 | -0.104 | -0.117 | -0.113 | -0.071 | -0.068 | 0.4500                |
| 0.5500                       | 0.112  | 0.137  | 0.031  | -0.002 | -0.014 | -0.030 | -0.037 | -0.052 | -0.020 | 0.120  | 0.141  | 0.125  | 0.116  | 0.109  | 0.002  | -0.014 | 0.5500                |
| 0.6500                       | 0.260  | 0.187  | 0.159  | 0.117  | 0.103  | 0.085  | 0.074  | 0.063  | 0.039  | 0.037  | 0.121  | 0.124  | 0.125  | 0.115  | 0.098  | 0.042  | 0.6500                |
| 0.7500                       | 0.328  | 0.251  | 0.217  | 0.172  | 0.155  | 0.139  | 0.130  | 0.114  | 0.096  | 0.083  | 0.076  | 0.127  | 0.130  | 0.118  | 0.104  |        | 0.7500                |
| 0.8500                       | 0.261  | 0.192  | 0.159  | 0.122  | 0.100  | 0.089  | 0.078  | 0.060  | 0.047  | 0.037  | 0.120  | 0.133  | 0.130  | 0.115  | 0.097  | 0.045  | 0.8500                |
| 0.9500                       | 0.114  | 0.060  | 0.034  | 0.002  | -0.015 | -0.025 | -0.037 | -0.053 | -0.019 | 0.128  | 0.132  | 0.122  | 0.124  | 0.107  | 0.000  | -0.011 | 0.9500                |

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TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(b) BVWC;  $\delta = -0.5^\circ$

| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                  |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------------|
| $\frac{g}{2\pi}$             | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990            |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $\frac{g}{2\pi}$ |
| M = 0.700 $Q = -0.428$       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                  |
| 0.0500                       | 0.061  | 0.093  | 0.078  | -0.092 | -0.015 | -0.035 | -0.052 | -0.049 | 0.014  | -0.008 | -0.035 | -0.040 | -0.048 | -0.014 | -0.003 | 0.057            |
| 0.1500                       | 0.094  | 0.091  | 0.051  | -0.037 | -0.003 | -0.060 | -0.050 | -0.033 | 0.021  | -0.028 | -0.037 | -0.042 | -0.046 | -0.026 | -0.005 | 0.062            |
| 0.2500                       | 0.117  | 0.087  | 0.052  | -0.008 | -0.015 | -0.027 | -0.041 | -0.026 | 0.021  | -0.036 | -0.044 | -0.044 | -0.049 | -0.030 | -0.007 | 0.060            |
| 0.3500                       | 0.108  | 0.086  | 0.054  | -0.020 | -0.019 | -0.023 | -0.037 | -0.027 | 0.021  | -0.035 | -0.037 | -0.044 | -0.050 | -0.029 | -0.007 | 0.059            |
| 0.4500                       | 0.061  | 0.094  | 0.073  | -0.078 | -0.003 | -0.039 | -0.044 | -0.032 | 0.014  | -0.025 | -0.037 | -0.044 | -0.052 | -0.022 | -0.007 | 0.053            |
| 0.5500                       | 0.029  | -0.045 | -0.120 | -0.162 | -0.012 | -0.047 | -0.056 | -0.045 | -0.058 | -0.149 | -0.193 | -0.183 | -0.131 | -0.027 | -0.007 | 0.050            |
| 0.6500                       | 0.011  | -0.063 | -0.101 | -0.110 | -0.056 | -0.054 | -0.063 | -0.058 | -0.077 | -0.122 | -0.163 | -0.164 | -0.128 | -0.052 | -0.018 | 0.048            |
| 0.7500                       | 0.003  | -0.063 | -0.098 | -0.099 | -0.067 | -0.062 | -0.068 | -0.061 | -0.082 | -0.116 | -0.150 | -0.155 | -0.125 | -0.054 | -0.021 | 0.048            |
| 0.8500                       | 0.006  | -0.067 | -0.096 | -0.111 | -0.063 | -0.063 | -0.070 | -0.059 | -0.079 | -0.119 | -0.165 | -0.165 | -0.132 | -0.050 | -0.016 | 0.048            |
| 0.9500                       | 0.017  | -0.075 | -0.116 | -0.161 | -0.037 | -0.057 | -0.067 | -0.050 | -0.058 | -0.144 | -0.197 | -0.191 | -0.143 | -0.025 | -0.003 | 0.053            |
| M = 0.698 $Q = -0.015$       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                  |
| 0.0500                       | 0.050  | 0.039  | -0.003 | -0.125 | -0.014 | -0.040 | -0.043 | -0.036 | -0.017 | -0.027 | -0.112 | -0.104 | -0.106 | -0.029 | -0.010 | 0.050            |
| 0.1500                       | 0.055  | 0.025  | -0.012 | -0.087 | -0.024 | -0.044 | -0.051 | -0.041 | -0.047 | -0.072 | -0.100 | -0.100 | -0.098 | -0.047 | -0.015 | 0.051            |
| 0.2500                       | 0.056  | 0.019  | -0.020 | -0.059 | -0.037 | -0.044 | -0.053 | -0.042 | -0.053 | -0.078 | -0.101 | -0.098 | -0.095 | -0.051 | -0.018 | 0.051            |
| 0.3500                       | 0.056  | 0.016  | -0.020 | -0.064 | -0.042 | -0.046 | -0.053 | -0.044 | -0.045 | -0.079 | -0.100 | -0.101 | -0.099 | -0.050 | -0.016 | 0.051            |
| 0.4500                       | 0.059  | 0.024  | -0.017 | -0.125 | -0.021 | -0.039 | -0.051 | -0.035 | -0.025 | -0.084 | -0.112 | -0.106 | -0.108 | -0.036 | -0.007 | 0.049            |
| 0.5500                       | 0.060  | 0.038  | -0.021 | -0.125 | -0.006 | -0.042 | -0.050 | -0.034 | -0.007 | -0.077 | -0.105 | -0.110 | -0.088 | -0.026 | -0.010 | 0.047            |
| 0.6500                       | 0.063  | 0.019  | -0.020 | -0.071 | -0.028 | -0.041 | -0.048 | -0.042 | -0.042 | -0.067 | -0.094 | -0.102 | -0.088 | -0.040 | -0.013 | 0.050            |
| 0.7500                       | 0.062  | 0.016  | -0.018 | -0.052 | -0.036 | -0.043 | -0.049 | -0.042 | -0.052 | -0.071 | -0.090 | -0.099 | -0.086 | -0.042 | -0.015 | 0.050            |
| 0.8500                       | 0.061  | 0.017  | -0.020 | -0.067 | -0.040 | -0.044 | -0.049 | -0.042 | -0.044 | -0.067 | -0.099 | -0.105 | -0.092 | -0.038 | -0.011 | 0.050            |
| 0.9500                       | 0.054  | 0.022  | -0.012 | -0.119 | -0.015 | -0.044 | -0.050 | -0.037 | -0.014 | -0.075 | -0.110 | -0.116 | -0.100 | -0.027 | -0.007 | 0.050            |
| M = 0.696 $Q = 03.68$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                  |
| 0.0500                       | 0.017  | -0.036 | -0.080 | -0.147 | 0.001  | -0.027 | -0.044 | -0.036 | -0.050 | -0.038 | -0.186 | -0.155 | -0.143 | -0.022 | 0.003  | 0.064            |
| 0.1500                       | 0.021  | -0.043 | -0.077 | -0.117 | -0.019 | -0.041 | -0.051 | -0.040 | -0.065 | -0.104 | -0.150 | -0.139 | -0.127 | -0.050 | -0.013 | 0.061            |
| 0.2500                       | 0.016  | -0.041 | -0.072 | -0.085 | -0.040 | -0.044 | -0.053 | -0.047 | -0.066 | -0.102 | -0.138 | -0.135 | -0.121 | -0.053 | -0.015 | 0.061            |
| 0.3500                       | 0.015  | -0.046 | -0.078 | -0.091 | -0.045 | -0.041 | -0.053 | -0.049 | -0.066 | -0.114 | -0.148 | -0.141 | -0.129 | -0.052 | -0.012 | 0.061            |
| 0.4500                       | 0.031  | -0.048 | -0.099 | -0.153 | -0.010 | -0.036 | -0.051 | -0.039 | -0.057 | -0.141 | -0.180 | -0.159 | -0.142 | -0.029 | 0.006  | 0.063            |
| 0.5500                       | 0.072  | 0.133  | 0.067  | -0.062 | 0.014  | -0.030 | -0.045 | -0.024 | 0.043  | 0.007  | -0.017 | -0.028 | -0.028 | -0.006 | 0.009  | 0.066            |
| 0.6500                       | 0.118  | 0.108  | 0.073  | 0.016  | 0.008  | -0.019 | -0.025 | -0.016 | 0.005  | -0.003 | -0.012 | -0.026 | -0.032 | -0.014 | 0.005  | 0.070            |
| 0.7500                       | 0.137  | 0.103  | 0.073  | 0.016  | 0.008  | -0.011 | -0.014 | -0.011 | 0.001  | -0.009 | -0.013 | -0.028 | -0.033 | -0.016 | 0.006  | 0.070            |
| 0.8500                       | 0.124  | 0.102  | 0.071  | -0.002 | 0.005  | -0.015 | -0.021 | -0.009 | -0.002 | -0.005 | -0.018 | -0.030 | -0.036 | -0.013 | 0.006  | 0.070            |
| 0.9500                       | 0.076  | 0.108  | 0.093  | -0.064 | 0.010  | -0.028 | -0.040 | -0.021 | 0.041  | 0.004  | -0.015 | -0.034 | -0.041 | -0.006 | 0.010  | 0.068            |
| M = 0.695 $Q = 07.85$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                  |
| 0.0500                       | -0.028 | -0.180 | -0.170 | -0.196 | -0.012 | -0.046 | -0.042 | -0.051 | -0.123 | -0.086 | -0.303 | -0.238 | -0.170 | -0.020 | 0.005  | 0.059            |
| 0.1500                       | -0.036 | -0.158 | -0.171 | -0.140 | -0.038 | -0.055 | -0.063 | -0.068 | -0.115 | -0.182 | -0.250 | -0.220 | -0.175 | -0.065 | -0.020 | 0.059            |
| 0.2500                       | -0.041 | -0.117 | -0.162 | -0.125 | -0.062 | -0.059 | -0.067 | -0.071 | -0.106 | -0.166 | -0.215 | -0.198 | -0.156 | -0.064 | -0.023 | 0.059            |
| 0.3500                       | -0.033 | -0.144 | -0.159 | -0.128 | -0.062 | -0.056 | -0.070 | -0.071 | -0.113 | -0.189 | -0.244 | -0.222 | -0.174 | -0.066 | -0.018 | 0.059            |
| 0.4500                       | -0.038 | -0.187 | -0.193 | -0.188 | -0.027 | -0.054 | -0.064 | -0.060 | -0.135 | -0.245 | -0.293 | -0.240 | -0.171 | -0.026 | 0.008  | 0.059            |
| 0.5500                       | 0.038  | 0.209  | 0.156  | -0.011 | 0.005  | -0.039 | -0.064 | -0.043 | 0.101  | 0.100  | 0.079  | 0.045  | 0.023  | 0.003  | 0.015  | 0.068            |
| 0.6500                       | 0.129  | 0.178  | 0.154  | 0.051  | 0.026  | -0.004 | -0.035 | -0.010 | 0.044  | 0.064  | 0.069  | 0.043  | 0.019  | 0.007  | 0.017  | 0.076            |
| 0.7500                       | 0.212  | 0.187  | 0.155  | 0.079  | 0.033  | 0.019  | 0.001  | 0.040  | 0.055  | 0.060  | 0.065  | 0.041  | 0.017  | 0.009  | 0.012  | 0.076            |
| 0.8500                       | 0.175  | 0.178  | 0.149  | 0.057  | 0.039  | 0.018  | -0.009 | 0.012  | 0.040  | 0.059  | 0.061  | 0.039  | 0.013  | 0.008  | 0.014  | 0.078            |
| 0.9500                       | 0.043  | 0.179  | 0.179  | -0.002 | 0.027  | -0.023 | -0.050 | -0.033 | 0.099  | 0.097  | 0.074  | 0.037  | 0.010  | 0.007  | 0.016  | 0.068            |
| M = 0.700 $Q = 11.79$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                  |
| 0.0500                       | -0.149 | -0.385 | -0.422 | -0.299 | -0.060 | -0.098 | -0.097 | -0.110 | -0.251 | -0.164 | -0.450 | -0.350 | -0.198 | -0.049 | -0.024 | 0.028            |
| 0.1500                       | -0.128 | -0.274 | -0.305 | -0.202 | -0.091 | -0.102 | -0.117 | -0.128 | -0.200 | -0.306 | -0.394 | -0.343 | -0.219 | -0.100 | -0.049 | 0.031            |
| 0.2500                       | -0.091 | -0.219 | -0.268 | -0.187 | -0.109 | -0.100 | -0.117 | -0.134 | -0.188 | -0.275 | -0.356 | -0.302 | -0.196 | -0.102 | -0.061 | 0.026            |
| 0.3500                       | -0.126 | -0.270 | -0.301 | -0.201 | -0.107 | -0.100 | -0.118 | -0.136 | -0.196 | -0.309 | -0.387 | -0.340 | -0.219 | -0.100 | -0.049 | 0.030            |
| 0.4500                       | -0.141 | -0.380 | -0.468 | -0.254 | -0.036 | -0.107 | -0.118 | -0.116 | -0.262 | -0.391 | -0.438 | -0.346 | -0.191 | -0.052 | -0.021 | 0.026            |
| 0.5500                       | -0.044 | 0.256  | 0.212  | 0.009  | -0.010 | -0.078 | -0.103 | -0.089 | 0.143  | 0.170  | 0.130  | 0.084  | 0.045  | -0.011 | -0.009 | 0.047            |
| 0.6500                       | 0.174  | 0.217  | 0.196  | 0.071  | 0.027  | -0.005 | -0.019 | -0.007 | 0.059  | 0.102  | 0.120  | 0.085  | 0.041  | -0.001 | -0.001 | 0.059            |
| 0.7500                       | 0.284  | 0.252  | 0.200  | 0.093  | 0.076  | 0.048  | 0.043  | 0.062  | 0.096  | 0.113  | 0.120  | 0.085  | 0.043  | 0.005  | -0.002 | 0.07500          |
| 0.8500                       | 0.187  | 0.227  | 0.214  | 0.102  | 0.030  | 0.018  | -0.020 | -0.020 | 0.052  | 0.099  | 0.110  | 0.082  | 0.037  | -0.004 | -0.004 | 0.056            |
| 0.9500                       | -0.036 | 0.228  | 0.238  | 0.030  | -0.002 | -0.062 | -0.099 | -0.073 | 0.132  | 0.165  | 0.123  | 0.074  | 0.033  | -0.007 | -0.008 | 0.045            |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
|                              | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 0.702 $\alpha = 15.91$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.275 | -0.676 | -0.610 | -0.335 | 0.006  | -0.105 | -0.128 | -0.138 | -0.399 | -0.247 | -0.579 | -0.351 | -0.187 | -0.135 | -0.126 | -0.049 | 0.0500                |
| 0.1500                       | -0.252 | -0.441 | -0.455 | -0.288 | -0.106 | -0.128 | -0.144 | -0.159 | -0.268 | -0.405 | -0.491 | -0.360 | -0.227 | -0.184 | -0.138 | -0.040 | 0.1500                |
| 0.2500                       | -0.198 | -0.365 | -0.439 | -0.235 | -0.128 | -0.128 | -0.151 | -0.170 | -0.260 | -0.377 | -0.440 | -0.327 | -0.228 | -0.190 | -0.146 | -0.043 | 0.2500                |
| 0.3500                       | -0.189 | -0.377 | -0.382 | -0.257 | -0.125 | -0.135 | -0.146 | -0.175 | -0.263 | -0.407 | -0.487 | -0.359 | -0.228 | -0.187 | -0.137 | -0.041 | 0.3500                |
| 0.4500                       | -0.260 | -0.668 | -0.623 | -0.352 | -0.042 | -0.115 | -0.139 | -0.136 | -0.409 | -0.550 | -0.560 | -0.351 | -0.182 | -0.143 | -0.124 | -0.050 | 0.4500                |
| 0.5500                       | 0.138  | 0.343  | 0.307  | 0.067  | 0.030  | -0.100 | -0.138 | -0.135 | 0.209  | 0.259  | 0.210  | 0.144  | 0.064  | -0.066 | -0.093 | -0.017 | 0.5500                |
| 0.6500                       | 0.219  | 0.304  | 0.279  | 0.110  | 0.043  | 0.013  | 0.008  | 0.017  | 0.104  | 0.174  | 0.198  | 0.149  | 0.069  | -0.042 | -0.070 | -0.004 | 0.6500                |
| 0.7500                       | 0.334  | 0.358  | 0.321  | 0.166  | 0.105  | 0.113  | 0.112  | 0.061  | 0.175  | 0.203  | 0.208  | 0.149  | 0.070  | -0.029 | -0.055 |        | 0.7500                |
| 0.8500                       | 0.239  | 0.308  | 0.303  | 0.184  | 0.074  | 0.028  | 0.005  | 0.038  | 0.094  | 0.167  | 0.191  | 0.146  | 0.061  | -0.044 | -0.075 | -0.003 | 0.8500                |
| 0.9500                       | -0.112 | 0.300  | 0.346  | 0.087  | -0.021 | -0.083 | -0.144 | -0.138 | 0.187  | 0.261  | 0.207  | 0.135  | 0.053  | -0.061 | -0.090 | -0.017 | 0.9500                |
| M = 0.905 $\alpha = 03.73$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.031  | -0.026 | -0.077 | -0.238 | -0.001 | -0.048 | -0.072 | -0.052 | -0.037 | -0.036 | -0.238 | -0.247 | -0.212 | -0.054 | -0.012 | 0.059  | 0.0500                |
| 0.1500                       | 0.026  | -0.041 | -0.091 | -0.184 | -0.023 | -0.057 | -0.074 | -0.051 | -0.063 | -0.117 | -0.199 | -0.227 | -0.198 | -0.084 | -0.028 | 0.059  | 0.1500                |
| 0.2500                       | 0.022  | -0.041 | -0.092 | -0.175 | -0.050 | -0.064 | -0.074 | -0.054 | -0.063 | -0.117 | -0.191 | -0.221 | -0.188 | -0.088 | -0.032 | 0.055  | 0.2500                |
| 0.3500                       | 0.020  | -0.042 | -0.094 | -0.184 | -0.055 | -0.061 | -0.074 | -0.057 | -0.061 | -0.124 | -0.189 | -0.228 | -0.192 | -0.085 | -0.027 | 0.056  | 0.3500                |
| 0.4500                       | 0.033  | -0.049 | -0.109 | -0.231 | -0.006 | -0.057 | -0.073 | -0.052 | -0.043 | -0.141 | -0.215 | -0.245 | -0.203 | -0.060 | -0.009 | 0.056  | 0.4500                |
| 0.5500                       | 0.072  | 0.124  | 0.061  | -0.117 | 0.018  | -0.049 | -0.065 | -0.047 | 0.028  | -0.028 | -0.050 | -0.072 | -0.066 | -0.037 | -0.007 | 0.062  | 0.5500                |
| 0.6500                       | 0.094  | 0.112  | 0.062  | -0.052 | 0.003  | -0.042 | -0.054 | -0.040 | 0.015  | -0.033 | -0.049 | -0.069 | -0.073 | -0.044 | -0.012 | 0.067  | 0.6500                |
| 0.7500                       | 0.135  | 0.099  | 0.059  | -0.035 | -0.010 | -0.033 | -0.044 | -0.029 | 0.021  | -0.036 | -0.049 | -0.069 | -0.072 | -0.040 | -0.017 |        | 0.7500                |
| 0.8500                       | 0.115  | 0.100  | 0.063  | -0.052 | -0.012 | -0.038 | -0.052 | -0.031 | 0.019  | -0.034 | -0.054 | -0.071 | -0.078 | -0.039 | -0.012 | 0.066  | 0.8500                |
| 0.9500                       | 0.074  | 0.097  | 0.067  | -0.104 | 0.019  | -0.045 | -0.059 | -0.042 | 0.024  | -0.029 | -0.055 | -0.076 | -0.083 | -0.030 | -0.007 | 0.065  | 0.9500                |
| M = 0.955 $\alpha = 03.78$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.052  | -0.027 | -0.052 | -0.203 | -0.015 | -0.022 | -0.064 | -0.041 | -0.008 | -0.030 | -0.216 | -0.256 | -0.241 | -0.087 | 0.028  | 0.093  | 0.0500                |
| 0.1500                       | 0.059  | -0.021 | -0.064 | -0.165 | -0.110 | -0.035 | -0.069 | -0.039 | -0.033 | -0.093 | -0.184 | -0.236 | -0.252 | -0.138 | 0.021  | 0.094  | 0.1500                |
| 0.2500                       | 0.040  | -0.019 | -0.071 | -0.154 | -0.192 | -0.034 | -0.070 | -0.041 | -0.033 | -0.090 | -0.173 | -0.234 | -0.255 | -0.159 | 0.021  | 0.095  | 0.2500                |
| 0.3500                       | 0.041  | -0.022 | -0.072 | -0.157 | -0.141 | -0.033 | -0.070 | -0.043 | -0.029 | -0.097 | -0.179 | -0.243 | -0.241 | -0.144 | 0.023  | 0.096  | 0.3500                |
| 0.4500                       | 0.053  | -0.023 | -0.087 | -0.183 | -0.019 | -0.034 | -0.068 | -0.043 | -0.010 | -0.110 | -0.202 | -0.262 | -0.228 | -0.107 | 0.029  | 0.091  | 0.4500                |
| 0.5500                       | 0.084  | 0.146  | 0.078  | -0.082 | -0.005 | -0.032 | -0.063 | -0.036 | 0.061  | -0.009 | -0.042 | -0.079 | -0.090 | -0.067 | 0.024  | 0.096  | 0.5500                |
| 0.6500                       | 0.126  | 0.121  | 0.076  | -0.067 | -0.050 | -0.022 | -0.053 | -0.032 | 0.015  | -0.012 | -0.039 | -0.078 | -0.094 | -0.057 | 0.014  | 0.100  | 0.6500                |
| 0.7500                       | 0.146  | 0.115  | 0.077  | -0.030 | -0.098 | -0.018 | -0.039 | -0.024 | 0.002  | -0.016 | -0.039 | -0.077 | -0.096 | -0.049 | 0.008  |        | 0.7500                |
| 0.8500                       | 0.144  | 0.114  | 0.080  | -0.026 | -0.092 | -0.023 | -0.053 | -0.026 | 0.010  | -0.012 | -0.044 | -0.080 | -0.101 | -0.047 | 0.012  | 0.101  | 0.8500                |
| 0.9500                       | 0.095  | 0.120  | 0.113  | -0.074 | -0.016 | -0.028 | -0.060 | -0.031 | 0.054  | -0.010 | -0.046 | -0.085 | -0.109 | -0.051 | 0.024  | 0.098  | 0.9500                |
| M = 1.005 $\alpha = 03.88$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.104  | 0.029  | 0.000  | -0.139 | -0.013 | -0.056 | -0.079 | -0.079 | -0.009 | -0.039 | -0.134 | -0.202 | -0.255 | -0.254 | -0.170 | -0.016 | 0.0500                |
| 0.1500                       | 0.099  | 0.028  | -0.014 | -0.099 | -0.140 | -0.050 | -0.080 | -0.082 | -0.035 | -0.063 | -0.104 | -0.185 | -0.254 | -0.302 | -0.205 | -0.004 | 0.1500                |
| 0.2500                       | 0.091  | 0.028  | -0.019 | -0.087 | -0.218 | -0.045 | -0.084 | -0.084 | -0.033 | -0.058 | -0.098 | -0.183 | -0.249 | -0.292 | -0.231 | -0.002 | 0.2500                |
| 0.3500                       | 0.091  | 0.027  | -0.022 | -0.098 | -0.154 | -0.049 | -0.084 | -0.085 | -0.033 | -0.064 | -0.098 | -0.190 | -0.250 | -0.314 | -0.202 | -0.003 | 0.3500                |
| 0.4500                       | 0.103  | 0.023  | -0.038 | -0.135 | -0.015 | -0.056 | -0.082 | -0.083 | -0.016 | -0.080 | -0.122 | -0.208 | -0.235 | -0.275 | -0.166 | -0.014 | 0.4500                |
| 0.5500                       | 0.138  | 0.191  | 0.119  | -0.011 | 0.006  | -0.053 | -0.076 | -0.075 | 0.049  | 0.007  | 0.024  | -0.045 | -0.086 | -0.160 | -0.162 | -0.014 | 0.5500                |
| 0.6500                       | 0.175  | 0.160  | 0.124  | 0.024  | -0.077 | -0.041 | -0.064 | -0.071 | -0.002 | 0.003  | 0.030  | -0.038 | -0.087 | -0.123 | -0.164 | -0.017 | 0.6500                |
| 0.7500                       | 0.194  | 0.161  | 0.120  | 0.038  | -0.137 | -0.035 | -0.052 | -0.061 | -0.021 | -0.001 | 0.031  | -0.036 | -0.084 | -0.110 | -0.165 |        | 0.7500                |
| 0.8500                       | 0.187  | 0.163  | 0.125  | 0.030  | -0.111 | -0.045 | -0.064 | -0.062 | -0.008 | 0.003  | 0.027  | -0.038 | -0.090 | -0.119 | -0.162 | -0.019 | 0.8500                |
| 0.9500                       | 0.136  | 0.165  | 0.158  | -0.008 | -0.007 | -0.053 | -0.071 | -0.079 | 0.044  | 0.006  | 0.024  | -0.045 | -0.101 | -0.142 | -0.155 | -0.016 | 0.9500                |
| M = 1.044 $\alpha = 03.88$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.060  | 0.007  | 0.008  | -0.087 | 0.043  | 0.064  | 0.012  | -0.009 | 0.015  | -0.082 | -0.190 | -0.186 | -0.231 | -0.227 | -0.153 | -0.029 | 0.0500                |
| 0.1500                       | 0.050  | 0.006  | -0.003 | -0.052 | -0.082 | 0.030  | 0.000  | -0.020 | -0.015 | -0.074 | -0.160 | -0.178 | -0.223 | -0.266 | -0.194 | -0.021 | 0.1500                |
| 0.2500                       | 0.047  | 0.006  | -0.007 | -0.045 | -0.151 | 0.032  | -0.004 | -0.021 | -0.022 | -0.070 | -0.146 | -0.181 | -0.219 | -0.255 | -0.237 | -0.022 | 0.2500                |
| 0.3500                       | 0.047  | 0.007  | -0.011 | -0.045 | -0.082 | 0.035  | -0.005 | -0.022 | -0.013 | -0.069 | -0.152 | -0.179 | -0.219 | -0.275 | -0.196 | -0.021 | 0.3500                |
| 0.4500                       | 0.053  | 0.005  | -0.031 | -0.083 | 0.043  | 0.032  | 0.001  | -0.016 | 0.010  | -0.092 | -0.176 | -0.183 | -0.214 | -0.249 | -0.158 | -0.027 | 0.4500                |
| 0.5500                       | 0.095  | 0.172  | 0.127  | 0.034  | 0.053  | 0.032  | 0.014  | -0.007 | 0.087  | 0.006  | -0.042 | -0.046 | -0.060 | -0.125 | -0.144 | -0.024 | 0.5500                |
| 0.6500                       | 0.132  | 0.148  | 0.123  | 0.064  | -0.056 | 0.039  | 0.037  | 0.007  | 0.035  | 0.003  | -0.041 | -0.042 | -0.057 | -0.089 | -0.137 | -0.035 | 0.6500                |
| 0.7500                       | 0.156  | 0.144  | 0.126  | 0.078  | -0.086 | 0.042  | 0.046  | 0.025  | 0.011  | -0.001 | -0.042 | -0.045 | -0.056 | -0.081 | -0.132 |        | 0.7500                |
| 0.8500                       | 0.144  | 0.142  | 0.129  | 0.070  | -0.079 | 0.037  | 0.039  | 0.018  | 0.026  | 0.002  | -0.046 | -0.042 | -0.063 | -0.092 | -0.130 | -0.038 | 0.8500                |
| 0.9500                       | 0.098  | 0.150  | 0.162  | 0.031  | 0.047  | 0.033  | 0.022  | -0.005 | 0.079  | 0.005  | -0.046 | -0.045 | -0.075 | -0.116 | -0.134 | -0.025 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| $\frac{\theta}{2\pi}$     | Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        | $\frac{\theta}{2\pi}$ |
|---------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
|                           | 0.050                        | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  |                       |
| $C_p$                     | $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 1.102      Q = 03.93  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.096                        | 0.036  | 0.039  | -0.036 | 0.053  | -0.017 | -0.008 | -0.011 | 0.094  | -0.118 | -0.059 | -0.141 | -0.197 | -0.142 | -0.045 | 0.074                 |
| 0.1500                    | 0.090                        | 0.036  | 0.033  | -0.019 | -0.113 | -0.012 | -0.021 | 0.001  | 0.059  | 0.036  | -0.048 | -0.127 | -0.169 | -0.161 | -0.086 | 0.072                 |
| 0.2500                    | 0.083                        | 0.038  | 0.034  | -0.011 | -0.116 | -0.004 | -0.019 | 0.012  | 0.045  | 0.032  | -0.034 | -0.126 | -0.162 | -0.146 | -0.124 | 0.069                 |
| 0.3500                    | 0.080                        | 0.038  | 0.028  | -0.016 | -0.118 | -0.001 | -0.017 | 0.013  | 0.057  | 0.029  | -0.041 | -0.131 | -0.172 | -0.180 | -0.087 | 0.074                 |
| 0.4500                    | 0.098                        | 0.035  | 0.009  | -0.044 | 0.052  | -0.015 | -0.016 | 0.006  | 0.086  | 0.020  | -0.059 | -0.148 | -0.183 | -0.167 | -0.047 | 0.076                 |
| 0.5500                    | 0.131                        | 0.200  | 0.154  | 0.083  | 0.066  | -0.015 | 0.002  | 0.127  | 0.108  | 0.098  | 0.008  | -0.045 | -0.066 | -0.040 | -0.088 | 0.5500                |
| 0.6500                    | 0.164                        | 0.169  | 0.161  | 0.108  | -0.058 | 0.007  | -0.009 | -0.005 | 0.056  | 0.114  | 0.104  | 0.016  | -0.047 | -0.035 | -0.042 | 0.097                 |
| 0.7500                    | 0.188                        | 0.173  | 0.158  | 0.117  | -0.029 | 0.024  | -0.002 | -0.001 | 0.023  | 0.114  | 0.107  | 0.019  | -0.047 | -0.029 | -0.042 | 0.7500                |
| 0.8500                    | 0.176                        | 0.166  | 0.145  | 0.113  | -0.060 | 0.023  | -0.004 | 0.001  | 0.046  | 0.120  | 0.101  | 0.019  | -0.054 | -0.040 | -0.033 | 0.8500                |
| 0.9500                    | 0.125                        | 0.176  | 0.195  | 0.082  | 0.063  | 0.001  | -0.016 | -0.009 | 0.115  | 0.116  | 0.098  | 0.012  | -0.067 | -0.056 | -0.030 | 0.9500                |
| M = 1.298      Q = -04.13 |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.115                        | 0.159  | 0.159  | 0.108  | 0.025  | 0.016  | -0.014 | -0.001 | 0.079  | -0.131 | 0.026  | 0.012  | -0.018 | -0.023 | -0.046 | -0.029                |
| 0.1500                    | 0.148                        | 0.144  | 0.135  | 0.108  | 0.016  | 0.028  | -0.002 | -0.002 | -0.010 | 0.020  | 0.016  | 0.021  | -0.007 | 0.012  | -0.037 | -0.047                |
| 0.2500                    | 0.175                        | 0.141  | 0.133  | 0.106  | 0.078  | 0.018  | 0.003  | 0.002  | -0.004 | 0.009  | 0.018  | 0.018  | -0.008 | 0.029  | -0.029 | -0.056                |
| 0.3500                    | 0.162                        | 0.139  | 0.141  | 0.108  | 0.017  | 0.030  | -0.005 | -0.005 | 0.076  | 0.022  | 0.019  | 0.018  | -0.012 | 0.001  | -0.038 | -0.051                |
| 0.4500                    | 0.127                        | 0.154  | -0.005 | -0.016 | -0.013 | 0.007  | -0.010 | -0.008 | 0.031  | 0.031  | 0.022  | 0.016  | -0.014 | -0.042 | -0.046 | -0.035                |
| 0.5500                    | 0.101                        | 0.061  | 0.003  | -0.019 | -0.087 | -0.005 | 0.000  | -0.018 | -0.008 | -0.032 | -0.079 | -0.108 | -0.128 | -0.112 | -0.061 | -0.023                |
| 0.6500                    | 0.086                        | 0.023  | 0.008  | -0.019 | -0.054 | -0.030 | 0.009  | -0.010 | -0.020 | -0.001 | -0.036 | -0.088 | -0.115 | -0.132 | -0.095 | -0.019                |
| 0.7500                    | 0.086                        | 0.029  | 0.008  | -0.019 | -0.054 | -0.030 | 0.009  | -0.010 | -0.020 | -0.001 | -0.036 | -0.088 | -0.115 | -0.132 | -0.095 | -0.019                |
| 0.8500                    | 0.090                        | 0.026  | 0.008  | -0.021 | -0.092 | 0.005  | -0.004 | -0.011 | -0.008 | -0.045 | -0.097 | -0.122 | -0.135 | -0.092 | -0.009 | 0.7500                |
| 0.9500                    | 0.097                        | 0.012  | 0.038  | -0.029 | -0.024 | 0.013  | -0.013 | -0.007 | 0.033  | -0.028 | -0.074 | -0.122 | -0.141 | -0.117 | -0.058 | -0.013                |
| M = 1.299      Q = -00.20 |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.110                        | 0.100  | 0.085  | 0.035  | 0.010  | 0.022  | -0.013 | 0.003  | 0.068  | -0.156 | -0.025 | -0.052 | -0.083 | -0.082 | -0.071 | -0.037                |
| 0.1500                    | 0.117                        | 0.085  | 0.072  | 0.036  | -0.043 | 0.006  | -0.006 | -0.005 | -0.003 | 0.002  | -0.025 | -0.042 | -0.074 | -0.064 | -0.080 | -0.058                |
| 0.2500                    | 0.122                        | 0.077  | 0.067  | 0.035  | 0.010  | -0.017 | 0.000  | -0.008 | -0.014 | 0.005  | -0.023 | -0.041 | -0.073 | -0.048 | -0.088 | -0.067                |
| 0.3500                    | 0.122                        | 0.079  | 0.070  | 0.033  | -0.038 | 0.008  | -0.003 | -0.010 | 0.001  | 0.004  | -0.024 | -0.042 | -0.075 | -0.071 | -0.084 | -0.059                |
| 0.4500                    | 0.120                        | 0.088  | -0.028 | 0.028  | 0.010  | 0.021  | -0.016 | -0.007 | 0.060  | 0.002  | -0.033 | -0.048 | -0.077 | -0.104 | -0.072 | -0.042                |
| 0.5500                    | 0.124                        | 0.114  | 0.056  | 0.023  | -0.001 | 0.030  | -0.010 | -0.002 | 0.067  | -0.002 | -0.022 | -0.054 | -0.075 | -0.071 | -0.074 | -0.042                |
| 0.6500                    | 0.119                        | 0.078  | 0.062  | 0.033  | -0.048 | 0.012  | 0.003  | -0.001 | 0.000  | 0.007  | -0.014 | -0.048 | -0.068 | -0.075 | -0.084 | -0.045                |
| 0.7500                    | 0.114                        | 0.079  | 0.065  | 0.030  | -0.039 | 0.002  | -0.001 | -0.006 | -0.010 | 0.008  | -0.003 | -0.046 | -0.068 | -0.078 | -0.091 | 0.7500                |
| 0.8500                    | 0.112                        | 0.084  | 0.068  | 0.022  | -0.011 | 0.019  | -0.008 | 0.002  | 0.059  | 0.013  | -0.009 | -0.053 | -0.070 | -0.082 | -0.078 | -0.040                |
| 0.9500                    | 0.111                        | 0.091  | 0.086  | 0.022  | -0.011 | 0.019  | -0.008 | 0.002  | 0.059  | 0.002  | -0.027 | -0.067 | -0.087 | -0.076 | -0.069 | -0.033                |
| M = 1.301      Q = 03.69  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.088                        | 0.023  | 0.023  | -0.037 | -0.005 | 0.004  | -0.027 | -0.015 | 0.034  | -0.181 | -0.086 | -0.114 | -0.148 | -0.132 | -0.087 | -0.051                |
| 0.1500                    | 0.077                        | 0.024  | 0.006  | -0.027 | -0.096 | -0.016 | -0.012 | -0.015 | -0.017 | -0.023 | -0.067 | -0.095 | -0.132 | -0.126 | -0.120 | -0.064                |
| 0.2500                    | 0.076                        | 0.025  | 0.004  | -0.021 | -0.052 | -0.036 | -0.002 | -0.019 | -0.025 | -0.016 | -0.054 | -0.093 | -0.129 | -0.103 | -0.140 | -0.079                |
| 0.3500                    | 0.078                        | 0.022  | 0.002  | -0.026 | -0.096 | -0.018 | -0.008 | -0.027 | -0.012 | -0.022 | -0.066 | -0.095 | -0.134 | -0.133 | -0.121 | -0.066                |
| 0.4500                    | 0.094                        | 0.023  | -0.039 | -0.009 | -0.001 | -0.023 | -0.023 | -0.021 | 0.032  | -0.040 | -0.092 | 0.005  | -0.014 | -0.028 | -0.080 | -0.057                |
| 0.5500                    | 0.125                        | 0.159  | 0.128  | 0.091  | -0.005 | 0.008  | -0.030 | -0.021 | 0.082  | 0.029  | 0.020  | -0.112 | -0.145 | -0.151 | -0.090 | -0.054                |
| 0.6500                    | 0.153                        | 0.119  | 0.123  | 0.083  | 0.004  | 0.024  | -0.007 | -0.010 | -0.011 | 0.015  | 0.024  | 0.007  | -0.009 | -0.018 | -0.065 | -0.073                |
| 0.7500                    | 0.169                        | 0.119  | 0.123  | 0.084  | 0.059  | -0.001 | -0.004 | -0.006 | 0.003  | 0.025  | 0.006  | -0.013 | -0.023 | -0.023 | -0.051 | 0.7500                |
| 0.8500                    | 0.155                        | 0.117  | 0.128  | 0.084  | 0.006  | 0.015  | -0.004 | -0.008 | -0.014 | 0.022  | 0.021  | 0.001  | -0.015 | -0.026 | -0.058 | -0.068                |
| 0.9500                    | 0.119                        | 0.127  | 0.173  | 0.080  | -0.012 | 0.009  | -0.020 | -0.016 | 0.072  | 0.024  | 0.021  | -0.006 | -0.028 | -0.031 | -0.073 | -0.053                |
| M = 1.299      Q = 07.76  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.049                        | -0.057 | -0.042 | -0.092 | -0.033 | -0.017 | -0.040 | -0.036 | -0.007 | -0.213 | -0.142 | -0.175 | -0.207 | -0.138 | -0.087 | -0.056                |
| 0.1500                    | 0.041                        | -0.028 | -0.049 | -0.083 | -0.146 | -0.025 | -0.022 | -0.034 | -0.028 | -0.051 | -0.115 | -0.164 | -0.191 | -0.162 | -0.119 | -0.055                |
| 0.2500                    | 0.046                        | -0.015 | -0.041 | -0.075 | -0.110 | -0.014 | -0.012 | -0.023 | -0.029 | -0.035 | -0.098 | -0.150 | -0.177 | -0.188 | -0.151 | -0.101                |
| 0.3500                    | 0.042                        | -0.034 | -0.054 | -0.082 | -0.147 | -0.024 | -0.022 | -0.035 | -0.024 | -0.055 | -0.115 | -0.157 | -0.192 | -0.167 | -0.126 | -0.059                |
| 0.4500                    | 0.051                        | -0.050 | -0.088 | -0.088 | -0.040 | -0.017 | -0.039 | -0.038 | -0.009 | -0.098 | -0.144 | -0.172 | -0.202 | -0.150 | -0.089 | -0.064                |
| 0.5500                    | 0.111                        | 0.237  | 0.210  | 0.176  | 0.013  | -0.014 | -0.041 | -0.042 | 0.117  | 0.089  | 0.098  | 0.086  | 0.071  | 0.031  | -0.051 | -0.072                |
| 0.6500                    | 0.199                        | 0.189  | 0.206  | 0.172  | 0.073  | 0.045  | -0.012 | -0.012 | 0.008  | 0.055  | 0.091  | 0.086  | 0.071  | 0.057  | -0.003 | -0.077                |
| 0.7500                    | 0.243                        | 0.199  | 0.216  | 0.176  | 0.144  | 0.058  | 0.019  | 0.018  | 0.011  | 0.102  | 0.086  | 0.083  | 0.055  | 0.022  | 0.048  | -0.005                |
| 0.8500                    | 0.203                        | 0.188  | 0.216  | 0.172  | 0.073  | 0.043  | -0.017 | -0.007 | -0.012 | 0.055  | 0.096  | 0.082  | 0.073  | 0.048  | -0.005 | -0.065                |
| 0.9500                    | 0.108                        | 0.196  | 0.263  | 0.165  | 0.016  | -0.007 | -0.038 | -0.032 | 0.104  | 0.089  | 0.096  | 0.069  | 0.052  | 0.031  | -0.048 | -0.059                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| $\frac{\theta}{2\pi}$      | Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | $\frac{\theta}{2\pi}$ |
|----------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
|                            | 0.050                        | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  |                       |
| $C_p$                      | $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 1.296 $\alpha = 11.79$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | -0.015                       | -0.126 | -0.103 | -0.148 | -0.059 | -0.060 | -0.062 | -0.060 | -0.059 | -0.254 | -0.207 | -0.241 | -0.258 | -0.133 | -0.083 | -0.052 | 0.0500                |
| 0.1500                     | -0.003                       | -0.091 | -0.111 | -0.140 | -0.182 | -0.055 | -0.050 | -0.061 | -0.051 | -0.096 | -0.179 | -0.238 | -0.259 | -0.162 | -0.077 | -0.036 | 0.1500                |
| 0.2500                     | 0.017                        | -0.043 | -0.087 | -0.127 | -0.151 | -0.021 | -0.032 | -0.054 | -0.050 | -0.070 | -0.162 | -0.212 | -0.242 | -0.233 | -0.049 | -0.111 | 0.2500                |
| 0.3500                     | -0.004                       | -0.083 | -0.109 | -0.136 | -0.179 | -0.053 | -0.046 | -0.059 | -0.047 | -0.103 | -0.179 | -0.226 | -0.258 | -0.164 | -0.078 | -0.039 | 0.3500                |
| 0.4500                     | -0.019                       | -0.133 |        | -0.159 | -0.062 | -0.067 | -0.064 | -0.059 | -0.066 | -0.174 | -0.205 | -0.237 | -0.252 | -0.135 | -0.078 | -0.061 | 0.4500                |
| 0.5500                     | 0.080                        | 0.331  | 0.308  | 0.253  | 0.042  | -0.039 | -0.089 | -0.076 | 0.142  | 0.172  | 0.180  | 0.175  | 0.160  | 0.105  | -0.041 | -0.067 | 0.5500                |
| 0.6500                     | 0.239                        | 0.273  | 0.296  | 0.263  | 0.133  | 0.056  | -0.021 | -0.011 | -0.018 | 0.074  | 0.183  | 0.178  | 0.161  | 0.140  | 0.031  | -0.050 | 0.6500                |
| 0.7500                     | 0.319                        | 0.294  | 0.316  | 0.277  | 0.217  | 0.124  | 0.061  | 0.021  | 0.036  | 0.030  | 0.183  | 0.173  | 0.158  | 0.138  | 0.076  |        | 0.7500                |
| 0.8500                     | 0.246                        | 0.270  | 0.302  | 0.269  | 0.137  | 0.057  | -0.021 | -0.013 | -0.021 | 0.068  | 0.177  | 0.174  | 0.155  | 0.130  | 0.037  | -0.042 | 0.8500                |
| 0.9500                     | 0.083                        | 0.304  | 0.368  | 0.256  | 0.049  | -0.032 | -0.092 | -0.083 | 0.114  | 0.175  | 0.178  | 0.161  | 0.134  | 0.113  | -0.034 | -0.056 | 0.9500                |
| M = 1.299 $\alpha = 15.82$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | -0.103                       | -0.175 | -0.246 | -0.258 | -0.094 | -0.110 | -0.143 | -0.097 | -0.126 | -0.299 | -0.268 | -0.290 | -0.312 | -0.096 | -0.068 | -0.037 | 0.0500                |
| 0.1500                     | -0.073                       | -0.156 | -0.164 | -0.182 | -0.229 | -0.084 | -0.093 | -0.073 | -0.074 | -0.144 | -0.235 | -0.285 | -0.312 | -0.156 | -0.067 | 0.015  | 0.1500                |
| 0.2500                     | 0.003                        | -0.073 | -0.120 | -0.177 | -0.194 | -0.028 | -0.082 | -0.063 | -0.094 | -0.095 | -0.219 | -0.262 | -0.297 | -0.306 | -0.046 | 0.008  | 0.2500                |
| 0.3500                     | -0.050                       | -0.164 | -0.153 | -0.179 | -0.219 | -0.078 | -0.079 | -0.063 | -0.073 | -0.144 | -0.230 | -0.279 | -0.312 | -0.157 | -0.068 | 0.014  | 0.3500                |
| 0.4500                     | -0.109                       | -0.293 |        | -0.245 | -0.087 | -0.113 | -0.128 | -0.082 | -0.133 | -0.244 | -0.273 | -0.287 | -0.311 | -0.103 | -0.069 | -0.045 | 0.4500                |
| 0.5500                     | 0.043                        | 0.430  | 0.409  | 0.345  | 0.068  | -0.074 | -0.194 | -0.148 | 0.112  | 0.247  | 0.274  | 0.274  | 0.250  | 0.188  | 0.010  | -0.060 | 0.5500                |
| 0.6500                     | 0.291                        | 0.366  | 0.393  | 0.364  | 0.201  | 0.086  | 0.002  | -0.042 | -0.017 | 0.090  | 0.281  | 0.282  | 0.253  | 0.243  | 0.095  | -0.025 | 0.6500                |
| 0.7500                     | 0.413                        | 0.411  | 0.430  | 0.389  | 0.290  | 0.202  | 0.112  | 0.074  | 0.063  | 0.079  | 0.285  | 0.282  | 0.253  | 0.259  | 0.148  |        | 0.7500                |
| 0.8500                     | 0.300                        | 0.370  | 0.405  | 0.367  | 0.208  | 0.092  | 0.002  | -0.044 | -0.015 | 0.081  | 0.281  | 0.283  | 0.250  | 0.244  | 0.097  | -0.021 | 0.8500                |
| 0.9500                     | 0.047                        | 0.416  | 0.479  | 0.343  | 0.083  | -0.070 | -0.201 | -0.144 | 0.103  | 0.253  | 0.270  | 0.268  | 0.231  | 0.206  | 0.012  | -0.056 | 0.9500                |
| M = 1.498 $\alpha = 03.68$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | 0.076                        | 0.028  | 0.008  | -0.024 | -0.019 | 0.005  | -0.014 | -0.019 | 0.025  | -0.132 | -0.057 | -0.094 | -0.120 | -0.102 | -0.069 | -0.062 | 0.0500                |
| 0.1500                     | 0.076                        | 0.024  | 0.008  | -0.021 | -0.054 | 0.006  | -0.020 | -0.015 | -0.013 | -0.004 | -0.041 | -0.085 | -0.100 | -0.091 | -0.101 | -0.072 | 0.1500                |
| 0.2500                     | 0.070                        | 0.022  | 0.007  | -0.013 | -0.035 | -0.056 | -0.015 | -0.011 | -0.013 | -0.004 | -0.034 | -0.082 | -0.095 | -0.117 | -0.099 | -0.089 | 0.2500                |
| 0.3500                     | 0.067                        | 0.016  | 0.005  | -0.016 | -0.036 | -0.005 | -0.013 | -0.010 | -0.011 | -0.006 | -0.044 | -0.081 | -0.103 | -0.096 | -0.098 | -0.077 | 0.3500                |
| 0.4500                     | 0.078                        | 0.015  | -0.003 | -0.027 | -0.046 | 0.023  | -0.022 | -0.014 | 0.017  | -0.034 | -0.066 | -0.092 | -0.113 | -0.111 | -0.065 | -0.061 | 0.4500                |
| 0.5500                     | 0.108                        | 0.155  | 0.126  | 0.085  | -0.029 | 0.027  | -0.010 | -0.017 | 0.073  | 0.039  | 0.016  | 0.013  | 0.000  | -0.008 | -0.049 | -0.059 | 0.5500                |
| 0.6500                     | 0.142                        | 0.115  | 0.114  | 0.089  | 0.048  | 0.036  | -0.002 | -0.006 | -0.004 | 0.027  | 0.020  | 0.020  | 0.001  | -0.002 | -0.030 | -0.052 | 0.6500                |
| 0.7500                     | 0.153                        | 0.111  | 0.116  | 0.092  | 0.048  | 0.026  | 0.007  | -0.001 | 0.001  | -0.012 | 0.023  | 0.020  | 0.012  | -0.008 | -0.028 |        | 0.7500                |
| 0.8500                     | 0.145                        | 0.110  | 0.120  | 0.091  | 0.076  | 0.021  | -0.004 | -0.001 | -0.009 | 0.022  | 0.023  | 0.021  | 0.004  | -0.017 | -0.036 | -0.052 | 0.8500                |
| 0.9500                     | 0.103                        | 0.123  | 0.146  | 0.091  | -0.010 | 0.036  | -0.008 | -0.014 | 0.060  | 0.041  | 0.016  | 0.000  | -0.007 | -0.023 | -0.044 | -0.062 | 0.9500                |
| M = 1.698 $\alpha = 03.83$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | 0.107                        | 0.043  | 0.024  | -0.004 | -0.022 | 0.001  | 0.021  | 0.001  | 0.032  | -0.097 | -0.063 | -0.088 | -0.110 | -0.091 | -0.058 | -0.068 | 0.0500                |
| 0.1500                     | 0.088                        | 0.041  | 0.029  | -0.036 | 0.002  | 0.015  | -0.003 | 0.007  | 0.012  | -0.006 | -0.041 | -0.077 | -0.096 | -0.110 | -0.087 | -0.072 | 0.1500                |
| 0.2500                     | 0.078                        | 0.044  | 0.025  | -0.008 | -0.026 | -0.026 | 0.017  | -0.001 | -0.010 | -0.011 | -0.030 | -0.070 | -0.092 | -0.107 | -0.101 | -0.074 | 0.2500                |
| 0.3500                     | 0.079                        | 0.040  | 0.029  | -0.004 | -0.037 | -0.006 | 0.018  | -0.006 | -0.006 | -0.011 | -0.038 | -0.073 | -0.100 | -0.109 | -0.086 | -0.075 | 0.3500                |
| 0.4500                     | 0.101                        | 0.037  | 0.020  | -0.008 | -0.032 | 0.022  | 0.025  | -0.005 | 0.019  | -0.033 | -0.067 | -0.081 | -0.109 | -0.099 | -0.053 | -0.067 | 0.4500                |
| 0.5500                     | 0.133                        | 0.185  | 0.131  | 0.113  | -0.019 | 0.033  | 0.001  | 0.003  | 0.070  | 0.038  | 0.018  | 0.014  | -0.005 | -0.004 | -0.039 | -0.058 | 0.5500                |
| 0.6500                     | 0.164                        | 0.129  | 0.132  | 0.097  | 0.070  | 0.030  | 0.020  | 0.013  | 0.007  | 0.023  | 0.026  | 0.016  | -0.006 | -0.006 | -0.022 | -0.048 | 0.6500                |
| 0.7500                     | 0.188                        | 0.124  | 0.136  | 0.095  | 0.088  | 0.045  | 0.021  | 0.011  | 0.005  | 0.002  | 0.038  | 0.020  | -0.004 | -0.012 | -0.020 |        | 0.7500                |
| 0.8500                     | 0.176                        | 0.128  | 0.138  | 0.089  | 0.085  | 0.029  | 0.023  | 0.009  | 0.013  | 0.026  | 0.020  | 0.018  | -0.001 | -0.017 | -0.025 | -0.040 | 0.8500                |
| 0.9500                     | 0.142                        | 0.144  | 0.160  | 0.095  | 0.002  | 0.030  | -0.006 | 0.004  | 0.065  | 0.046  | 0.011  | 0.014  | 0.001  | -0.019 | -0.037 | -0.058 | 0.9500                |
| M = 1.893 $\alpha = 04.03$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | 0.077                        | 0.023  | 0.012  | -0.006 | -0.033 | 0.016  | 0.005  | -0.004 | 0.023  | -0.085 | -0.062 | -0.075 | -0.092 | -0.095 | -0.036 | -0.055 | 0.0500                |
| 0.1500                     | 0.065                        | 0.025  | 0.014  | -0.008 | -0.028 | -0.021 | -0.005 | -0.007 | -0.007 | -0.009 | -0.037 | -0.061 | -0.084 | -0.098 | -0.077 | -0.062 | 0.1500                |
| 0.2500                     | 0.058                        | 0.026  | 0.014  | -0.013 | -0.021 | -0.032 | -0.020 | 0.004  | -0.001 | -0.011 | -0.022 | -0.054 | -0.079 | -0.091 | -0.099 | -0.062 | 0.2500                |
| 0.3500                     | 0.059                        | 0.024  | 0.014  | -0.011 | -0.024 | -0.014 | -0.003 | -0.009 | -0.003 | -0.008 | -0.035 | -0.062 | -0.085 | -0.096 | -0.080 | -0.062 | 0.3500                |
| 0.4500                     | 0.071                        | 0.020  | 0.014  | -0.015 | -0.037 | 0.019  | 0.004  | -0.006 | 0.014  | -0.028 | -0.063 | -0.073 | -0.090 | -0.102 | -0.038 | -0.053 | 0.4500                |
| 0.5500                     | 0.105                        | 0.167  | 0.133  | 0.087  | -0.016 | 0.023  | 0.009  | 0.003  | 0.068  | 0.051  | 0.031  | 0.011  | 0.000  | 0.002  | -0.031 | -0.044 | 0.5500                |
| 0.6500                     | 0.147                        | 0.119  | 0.116  | 0.088  | 0.075  | 0.026  | 0.037  | 0.011  | 0.013  | 0.017  | 0.028  | 0.019  | 0.004  | -0.009 | -0.016 | -0.036 | 0.6500                |
| 0.7500                     | 0.164                        | 0.116  | 0.113  | 0.085  | 0.082  | 0.071  | 0.042  | 0.028  | 0.020  | 0.013  | 0.029  | 0.023  | 0.004  | -0.005 | -0.017 |        | 0.7500                |
| 0.8500                     | 0.155                        | 0.108  | 0.114  | 0.084  | 0.074  | 0.030  | 0.037  | 0.013  | 0.010  | 0.024  | 0.027  | 0.015  | 0.003  | -0.007 | -0.027 | -0.036 | 0.8500                |
| 0.9500                     | 0.116                        | 0.120  | 0.137  | 0.093  | -0.009 | 0.025  | 0.008  | 0.004  | 0.054  | 0.059  | 0.033  | 0.009  | 0.005  | -0.012 | -0.033 | -0.046 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT  $0^\circ$  SIDESLIP - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| $\frac{\theta}{2\pi}$     | Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        | $\frac{\theta}{2\pi}$ |
|---------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
|                           | 0.050                        | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  |                       |
|                           | $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 2.234      Q = -03.83 |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.101                        | 0.103  | 0.112  | 0.078  | 0.005  | 0.021  | 0.014  | -0.003 | 0.040  | 0.072  | 0.005  | 0.001  | -0.007 | -0.008 | -0.015 | 0.0500                |
| 0.1500                    | 0.138                        | 0.086  | 0.087  | 0.073  | 0.064  | 0.030  | 0.026  | 0.017  | -0.004 | -0.004 | 0.007  | -0.005 | -0.006 | -0.006 | -0.020 | 0.1500                |
| 0.2500                    | 0.138                        | 0.088  | 0.078  | 0.076  | 0.065  | 0.059  | 0.034  | 0.020  | 0.008  | -0.013 | 0.002  | 0.006  | -0.004 | -0.004 | -0.019 | 0.2500                |
| 0.3500                    | 0.127                        | 0.085  | 0.084  | 0.069  | 0.062  | 0.064  | 0.029  | 0.014  | -0.008 | 0.004  | 0.004  | -0.006 | -0.006 | -0.008 | -0.023 | 0.3500                |
| 0.4500                    | 0.102                        | 0.105  | 0.107  | 0.077  | 0.002  | 0.021  | 0.015  | -0.002 | 0.031  | 0.029  | 0.007  | 0.006  | -0.003 | -0.016 | -0.011 | 0.4500                |
| 0.5500                    | 0.073                        | 0.114  | 0.008  | -0.005 | -0.045 | 0.008  | 0.005  | -0.009 | 0.020  | -0.011 | -0.040 | -0.052 | -0.059 | -0.052 | -0.030 | 0.5500                |
| 0.6500                    | 0.059                        | 0.025  | 0.013  | -0.007 | -0.015 | -0.028 | -0.011 | -0.006 | -0.002 | -0.019 | -0.038 | -0.051 | -0.056 | -0.062 | -0.051 | 0.6500                |
| 0.7500                    | 0.053                        | 0.026  | 0.015  | -0.003 | -0.017 | -0.021 | -0.034 | -0.011 | -0.009 | -0.003 | -0.034 | -0.047 | -0.052 | -0.067 | -0.049 | 0.7500                |
| 0.8500                    | 0.058                        | 0.026  | 0.011  | -0.004 | -0.018 | -0.031 | -0.010 | -0.011 | -0.009 | -0.018 | -0.037 | -0.051 | -0.062 | -0.065 | -0.049 | 0.8500                |
| 0.9500                    | 0.069                        | 0.023  | 0.020  | -0.006 | -0.044 | 0.006  | 0.010  | -0.003 | 0.016  | -0.013 | -0.040 | -0.053 | -0.052 | -0.064 | -0.032 | 0.9500                |
| M = 2.233      Q = 00.15  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.094                        | 0.082  | 0.056  | 0.033  | -0.022 | 0.014  | 0.016  | 0.011  | 0.028  | 0.082  | -0.027 | -0.030 | -0.042 | -0.040 | -0.026 | 0.0500                |
| 0.1500                    | 0.099                        | 0.062  | 0.048  | 0.025  | 0.019  | -0.007 | 0.010  | 0.002  | -0.012 | -0.003 | -0.019 | -0.018 | -0.038 | -0.037 | -0.047 | 0.1500                |
| 0.2500                    | 0.091                        | 0.054  | 0.042  | 0.060  | 0.020  | -0.001 | -0.006 | -0.007 | -0.020 | -0.005 | -0.015 | -0.036 | -0.034 | -0.050 | -0.049 | 0.2500                |
| 0.3500                    | 0.091                        | 0.051  | 0.043  | 0.032  | 0.018  | -0.003 | 0.003  | -0.001 | -0.004 | -0.009 | -0.014 | -0.023 | -0.038 | -0.039 | -0.052 | 0.3500                |
| 0.4500                    | 0.094                        | 0.063  | 0.047  | 0.028  | -0.026 | 0.018  | 0.012  | 0.003  | 0.023  | -0.001 | -0.029 | -0.026 | -0.039 | -0.046 | -0.026 | 0.4500                |
| 0.5500                    | 0.095                        | 0.146  | 0.055  | 0.029  | -0.028 | 0.019  | 0.013  | 0.002  | 0.031  | 0.019  | -0.006 | -0.021 | -0.029 | -0.023 | -0.028 | 0.5500                |
| 0.6500                    | 0.097                        | 0.055  | 0.057  | 0.032  | 0.025  | 0.001  | 0.008  | 0.003  | 0.009  | 0.000  | -0.012 | -0.022 | -0.026 | -0.036 | -0.040 | 0.6500                |
| 0.7500                    | 0.101                        | 0.052  | 0.052  | 0.033  | 0.026  | 0.016  | 0.002  | 0.008  | 0.004  | -0.004 | 0.011  | -0.011 | -0.020 | -0.025 | -0.036 | 0.7500                |
| 0.8500                    | 0.103                        | 0.056  | 0.050  | 0.034  | 0.025  | -0.001 | -0.001 | 0.007  | -0.003 | 0.007  | 0.001  | -0.012 | -0.023 | -0.033 | -0.038 | 0.8500                |
| 0.9500                    | 0.097                        | 0.067  | 0.055  | 0.033  | -0.029 | 0.018  | 0.004  | 0.004  | 0.032  | 0.017  | -0.011 | -0.022 | -0.024 | -0.035 | -0.029 | 0.9500                |
| M = 2.231      Q = 04.18  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.074                        | 0.019  | 0.005  | -0.018 | -0.033 | 0.004  | 0.003  | -0.005 | 0.003  | 0.086  | -0.066 | -0.068 | -0.077 | -0.076 | -0.041 | 0.0500                |
| 0.1500                    | 0.069                        | 0.020  | 0.005  | -0.012 | -0.023 | -0.032 | -0.010 | -0.012 | -0.028 | -0.022 | -0.040 | -0.053 | -0.070 | -0.074 | -0.081 | 0.1500                |
| 0.2500                    | 0.054                        | 0.019  | 0.007  | -0.010 | -0.018 | -0.028 | -0.035 | -0.018 | -0.017 | -0.025 | -0.025 | -0.045 | -0.066 | -0.071 | -0.084 | 0.2500                |
| 0.3500                    | 0.051                        | 0.019  | 0.008  | -0.006 | -0.019 | -0.028 | -0.012 | -0.017 | -0.017 | -0.025 | -0.037 | -0.055 | -0.072 | -0.076 | -0.085 | 0.3500                |
| 0.4500                    | 0.066                        | 0.013  | 0.005  | -0.012 | -0.031 | -0.001 | 0.002  | -0.018 | -0.001 | -0.038 | -0.064 | -0.063 | -0.074 | -0.083 | -0.040 | 0.4500                |
| 0.5500                    | 0.095                        | 0.183  | 0.114  | 0.078  | -0.001 | 0.011  | 0.010  | -0.007 | 0.029  | 0.040  | 0.025  | 0.009  | 0.003  | 0.008  | -0.027 | 0.5500                |
| 0.6500                    | 0.136                        | 0.101  | 0.098  | 0.075  | 0.058  | 0.036  | 0.018  | 0.008  | -0.004 | 0.001  | 0.020  | 0.013  | 0.007  | 0.006  | -0.009 | 0.6500                |
| 0.7500                    | 0.153                        | 0.100  | 0.094  | 0.081  | 0.068  | 0.057  | 0.034  | 0.016  | 0.012  | 0.015  | 0.012  | 0.010  | 0.008  | -0.004 | -0.004 | 0.7500                |
| 0.8500                    | 0.149                        | 0.096  | 0.097  | 0.078  | 0.067  | 0.038  | 0.029  | 0.019  | -0.001 | -0.004 | 0.017  | 0.011  | 0.007  | -0.009 | -0.024 | 0.8500                |
| 0.9500                    | 0.105                        | 0.107  | 0.122  | 0.079  | 0.001  | 0.019  | 0.018  | -0.006 | 0.028  | 0.045  | 0.018  | 0.008  | 0.010  | -0.003 | -0.028 | 0.9500                |
| M = 2.234      Q = 08.16  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.035                        | -0.032 | -0.036 | -0.049 | -0.041 | 0.006  | -0.014 | -0.035 | -0.031 | 0.017  | -0.100 | -0.095 | -0.104 | -0.092 | -0.053 | 0.0500                |
| 0.1500                    | 0.032                        | -0.012 | -0.029 | -0.042 | -0.052 | -0.049 | -0.031 | -0.041 | -0.038 | -0.039 | -0.068 | -0.081 | -0.103 | -0.102 | -0.093 | 0.1500                |
| 0.2500                    | 0.027                        | 0.003  | -0.018 | -0.035 | -0.047 | -0.058 | -0.038 | -0.018 | -0.026 | -0.030 | -0.043 | -0.072 | -0.094 | -0.095 | -0.108 | 0.2500                |
| 0.3500                    | 0.021                        | -0.013 | -0.013 | -0.040 | -0.052 | -0.047 | -0.033 | -0.040 | -0.028 | -0.042 | -0.062 | -0.087 | -0.103 | -0.102 | -0.097 | 0.3500                |
| 0.4500                    | 0.036                        | -0.029 | -0.035 | -0.044 | -0.048 | 0.008  | -0.018 | -0.035 | -0.034 | -0.078 | -0.099 | -0.090 | -0.099 | -0.101 | -0.052 | 0.4500                |
| 0.5500                    | 0.108                        | 0.238  | 0.187  | 0.136  | 0.048  | 0.014  | -0.004 | -0.030 | 0.008  | 0.054  | 0.081  | 0.063  | 0.057  | 0.057  | 0.018  | 0.5500                |
| 0.6500                    | 0.199                        | 0.139  | 0.162  | 0.130  | 0.122  | 0.086  | 0.056  | 0.037  | 0.011  | -0.003 | 0.064  | 0.059  | 0.057  | 0.055  | 0.041  | 0.6500                |
| 0.7500                    | 0.240                        | 0.165  | 0.157  | 0.140  | 0.132  | 0.121  | 0.098  | 0.069  | 0.052  | 0.029  | 0.023  | 0.059  | 0.061  | 0.057  | 0.046  | 0.7500                |
| 0.8500                    | 0.204                        | 0.142  | 0.156  | 0.132  | 0.126  | 0.086  | 0.061  | 0.035  | 0.017  | -0.004 | 0.059  | 0.057  | 0.057  | 0.050  | 0.040  | 0.8500                |
| 0.9500                    | 0.116                        | 0.164  | 0.170  | 0.145  | 0.049  | 0.017  | -0.004 | -0.025 | -0.010 | 0.062  | 0.072  | 0.063  | 0.062  | 0.047  | -0.018 | 0.9500                |
| M = 2.231      Q = 12.24  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | -0.005                       | -0.077 | -0.078 | -0.085 | -0.041 | -0.011 | -0.047 | -0.073 | -0.091 | -0.049 | -0.128 | -0.115 | -0.124 | -0.101 | -0.061 | 0.0500                |
| 0.1500                    | 0.000                        | -0.047 | -0.056 | -0.068 | -0.079 | -0.057 | -0.052 | -0.063 | -0.057 | -0.060 | -0.098 | -0.105 | -0.127 | -0.120 | -0.096 | 0.1500                |
| 0.2500                    | 0.001                        | -0.027 | -0.033 | -0.061 | -0.075 | -0.081 | -0.036 | -0.032 | -0.042 | -0.051 | -0.069 | -0.099 | -0.123 | -0.116 | -0.130 | 0.2500                |
| 0.3500                    | -0.014                       | -0.051 | -0.059 | -0.067 | -0.079 | -0.059 | -0.044 | -0.064 | -0.048 | -0.060 | -0.092 | -0.110 | -0.127 | -0.120 | -0.098 | 0.3500                |
| 0.4500                    | -0.005                       | -0.079 | -0.075 | -0.090 | -0.051 | -0.007 | -0.048 | -0.073 | -0.093 | -0.115 | -0.126 | -0.110 | -0.120 | -0.116 | -0.066 | 0.4500                |
| 0.5500                    | 0.111                        | 0.291  | 0.252  | 0.210  | 0.100  | 0.002  | -0.023 | -0.051 | -0.048 | 0.088  | 0.109  | 0.109  | 0.102  | 0.104  | 0.002  | 0.5500                |
| 0.6500                    | 0.259                        | 0.195  | 0.220  | 0.200  | 0.189  | 0.143  | 0.108  | 0.073  | 0.037  | 0.022  | 0.075  | 0.109  | 0.116  | 0.113  | 0.095  | 0.6500                |
| 0.7500                    | 0.329                        | 0.246  | 0.227  | 0.220  | 0.202  | 0.189  | 0.166  | 0.129  | 0.099  | 0.079  | 0.060  | 0.097  | 0.122  | 0.115  | 0.102  | 0.7500                |
| 0.8500                    | 0.262                        | 0.199  | 0.215  | 0.200  | 0.192  | 0.148  | 0.108  | 0.077  | 0.043  | 0.023  | 0.068  | 0.115  | 0.121  | 0.111  | 0.094  | 0.8500                |
| 0.9500                    | 0.110                        | 0.222  | 0.258  | 0.220  | 0.105  | 0.006  | -0.026 | -0.055 | -0.052 | 0.091  | 0.100  | 0.107  | 0.112  | 0.101  | -0.001 | 0.9500                |

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TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.2^\circ$

| $\frac{\theta}{2\pi}$     | Fraction of body length, $x/l$ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | $\frac{\theta}{2\pi}$ |
|---------------------------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
|                           | 0.050                          | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  |                       |
|                           | $C_p$                          | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 0.697      Q = -04.42 |                                |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.060                          | 0.083  | -0.058 | -0.111 | -0.036 | -0.050 | -0.059 | -0.035 | 0.097  | 0.013  | -0.010 | -0.016 | -0.034 | 0.009  | 0.009  | 0.068  | 0.0500                |
| 0.1500                    | 0.096                          | 0.025  | -0.012 | -0.043 | -0.020 | -0.017 | -0.026 | -0.008 | 0.018  | 0.017  | -0.011 | -0.016 | -0.033 | -0.006 | 0.009  | 0.072  | 0.1500                |
| 0.2500                    | 0.118                          | 0.048  | -0.012 | -0.008 | -0.004 | -0.002 | -0.009 | 0.002  | 0.014  | 0.003  | -0.004 | -0.018 | -0.035 | -0.009 | 0.009  | 0.075  | 0.2500                |
| 0.3500                    | 0.107                          | 0.024  | -0.007 | -0.038 | -0.018 | -0.013 | -0.023 | -0.009 | 0.020  | 0.012  | -0.011 | -0.019 | -0.037 | -0.009 | 0.008  | 0.072  | 0.3500                |
| 0.4500                    | 0.070                          | 0.096  | -0.077 | -0.111 | -0.037 | -0.045 | -0.072 | -0.064 | 0.100  | 0.043  | -0.010 | -0.019 | -0.039 | -0.002 | 0.011  | 0.067  | 0.4500                |
| 0.5500                    | 0.039                          | 0.063  | -0.002 | -0.192 | -0.018 | -0.006 | -0.053 | -0.033 | 0.100  | 0.043  | -0.010 | -0.019 | -0.039 | -0.002 | 0.011  | 0.067  | 0.5500                |
| 0.6500                    | 0.024                          | 0.011  | -0.017 | -0.081 | -0.036 | -0.059 | -0.066 | -0.068 | -0.093 | -0.187 | -0.169 | -0.155 | -0.109 | -0.012 | 0.002  | 0.062  | 0.6500                |
| 0.7500                    | 0.022                          | 0.007  | -0.013 | -0.055 | -0.046 | -0.050 | -0.061 | -0.064 | -0.084 | -0.121 | -0.142 | -0.140 | -0.104 | -0.035 | -0.002 | 0.060  | 0.7500                |
| 0.8500                    | 0.025                          | 0.013  | -0.014 | -0.081 | -0.036 | -0.057 | -0.068 | -0.065 | -0.094 | -0.135 | -0.162 | -0.149 | -0.116 | -0.032 | 0.062  | 0.8500 |                       |
| 0.9500                    | 0.033                          | 0.032  |        | -0.195 | -0.018 | -0.065 | -0.072 | -0.062 | -0.139 | -0.190 | -0.180 | -0.166 | -0.121 | -0.010 | 0.008  | 0.063  | 0.9500                |
| M = 0.696      Q = -00.06 |                                |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.047                          | 0.212  | -0.077 | -0.136 | -0.035 | -0.043 | -0.044 | -0.023 | 0.088  | 0.010  | -0.087 | -0.088 | -0.099 | -0.018 | -0.003 | 0.061  | 0.0500                |
| 0.1500                    | 0.061                          | -0.078 | -0.117 | -0.086 | -0.036 | -0.024 | -0.027 | -0.018 | -0.001 | -0.013 | -0.076 | -0.083 | -0.089 | -0.037 | -0.008 | 0.060  | 0.1500                |
| 0.2500                    | 0.056                          | -0.063 | -0.096 | -0.066 | -0.035 | -0.026 | -0.032 | -0.017 | -0.015 | -0.038 | -0.069 | -0.081 | -0.086 | -0.040 | -0.009 | 0.060  | 0.2500                |
| 0.3500                    | 0.059                          | -0.078 | -0.110 | -0.078 | -0.037 | -0.021 | -0.031 | -0.017 | 0.001  | -0.025 | -0.079 | -0.086 | -0.090 | -0.038 | -0.008 | 0.058  | 0.3500                |
| 0.4500                    | 0.064                          | 0.209  | -0.113 | -0.126 | -0.023 | -0.036 | -0.036 | -0.021 | 0.086  | 0.009  | -0.088 | -0.093 | -0.101 | -0.028 | -0.002 | 0.056  | 0.4500                |
| 0.5500                    | 0.075                          | 0.156  | 0.108  | -0.230 | -0.069 | -0.061 | -0.053 | -0.040 | -0.090 | -0.132 | -0.087 | -0.088 | -0.068 | -0.013 | -0.002 | 0.056  | 0.5500                |
| 0.6500                    | 0.084                          | 0.094  | 0.075  | 0.032  | 0.010  | -0.042 | -0.051 | -0.046 | -0.069 | -0.093 | -0.092 | -0.087 | -0.070 | -0.022 | 0.004  | 0.062  | 0.6500                |
| 0.7500                    | 0.089                          | 0.084  | 0.065  | -0.013 | -0.016 | -0.035 | -0.048 | -0.048 | -0.063 | -0.088 | -0.088 | -0.088 | -0.072 | -0.027 | 0.001  | 0.7500 |                       |
| 0.8500                    | 0.084                          | 0.094  | 0.065  | -0.028 | -0.009 | -0.042 | -0.054 | -0.046 | -0.070 | -0.096 | -0.097 | -0.090 | -0.076 | -0.021 | 0.005  | 0.066  | 0.8500                |
| 0.9500                    | 0.078                          | 0.121  | 0.102  | -0.213 | -0.061 | -0.067 | -0.057 | -0.040 | -0.102 | -0.135 | -0.094 | -0.099 | -0.080 | -0.012 | 0.002  | 0.062  | 0.9500                |
| M = 0.701      Q = 03.68  |                                |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.034                          | 0.314  | -0.197 | -0.195 | -0.038 | -0.055 | -0.051 | -0.043 | 0.075  | 0.015  | -0.167 | -0.140 | -0.132 | -0.020 | -0.003 | 0.059  | 0.0500                |
| 0.1500                    | 0.011                          | -0.184 | -0.193 | -0.124 | -0.043 | -0.041 | -0.041 | -0.036 | -0.006 | -0.027 | -0.136 | -0.131 | -0.121 | -0.047 | -0.011 | 0.057  | 0.1500                |
| 0.2500                    | 0.010                          | -0.150 | -0.188 | -0.103 | -0.047 | -0.030 | -0.045 | -0.030 | -0.023 | -0.049 | -0.112 | -0.126 | -0.116 | -0.051 | -0.014 | 0.056  | 0.2500                |
| 0.3500                    | 0.011                          | -0.190 | -0.181 | -0.122 | -0.054 | -0.029 | -0.039 | -0.036 | -0.010 | -0.037 | -0.135 | -0.136 | -0.122 | -0.047 | -0.009 | 0.056  | 0.3500                |
| 0.4500                    | 0.036                          | 0.292  | -0.249 | -0.186 | -0.043 | -0.041 | -0.041 | -0.033 | 0.083  | 0.028  | -0.161 | -0.147 | -0.134 | -0.030 | 0.001  | 0.063  | 0.4500                |
| 0.5500                    | 0.072                          | 0.225  | 0.203  | -0.259 | -0.081 | -0.075 | -0.049 | -0.038 | -0.080 | -0.150 | -0.019 | -0.025 | -0.029 | -0.005 | 0.004  | 0.063  | 0.5500                |
| 0.6500                    | 0.128                          | 0.162  | 0.151  | 0.018  | 0.006  | -0.044 | -0.048 | -0.039 | -0.052 | -0.087 | -0.030 | -0.028 | -0.033 | -0.016 | 0.001  | 0.066  | 0.6500                |
| 0.7500                    | 0.144                          | 0.156  | 0.149  | 0.035  | 0.006  | -0.022 | -0.041 | -0.038 | -0.046 | -0.065 | -0.030 | -0.030 | -0.033 | -0.019 | -0.001 | 0.7500 |                       |
| 0.8500                    | 0.135                          | 0.159  | 0.150  | 0.021  | 0.006  | -0.038 | -0.048 | -0.037 | -0.057 | -0.087 | -0.041 | -0.031 | -0.039 | -0.016 | -0.001 | 0.067  | 0.8500                |
| 0.9500                    | 0.084                          | 0.191  | 0.207  | -0.218 | -0.092 | -0.079 | -0.051 | -0.039 | -0.084 | -0.157 | -0.027 | -0.031 | -0.037 | -0.002 | 0.004  | 0.062  | 0.9500                |
| M = 0.699      Q = 07.71  |                                |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | -0.035                         | 0.379  | -0.413 | -0.322 | -0.091 | -0.091 | -0.084 | -0.078 | -0.038 | -0.051 | -0.307 | -0.223 | -0.123 | -0.020 | -0.005 | 0.048  | 0.0500                |
| 0.1500                    | -0.037                         | -0.388 | -0.423 | -0.154 | -0.058 | -0.048 | -0.073 | -0.079 | -0.094 | -0.151 | -0.243 | -0.207 | -0.139 | -0.061 | -0.030 | 0.045  | 0.1500                |
| 0.2500                    | -0.036                         | -0.261 | -0.301 | -0.155 | -0.069 | -0.053 | -0.060 | -0.080 | -0.097 | -0.148 | -0.208 | -0.188 | -0.134 | -0.064 | -0.033 | 0.043  | 0.2500                |
| 0.3500                    | -0.038                         | -0.412 | -0.394 | -0.161 | -0.067 | -0.033 | -0.060 | -0.075 | -0.092 | -0.163 | -0.237 | -0.208 | -0.140 | -0.064 | -0.029 | 0.044  | 0.3500                |
| 0.4500                    | -0.036                         | 0.359  | -0.645 | -0.317 | -0.085 | -0.086 | -0.034 | -0.087 | -0.039 | -0.182 | -0.305 | -0.225 | -0.123 | -0.026 | -0.003 | 0.050  | 0.4500                |
| 0.5500                    | 0.027                          | 0.281  | 0.301  | 0.335  | -0.083 | -0.079 | -0.071 | -0.060 | 0.011  | 0.040  | 0.060  | 0.029  | 0.006  | 0.000  | 0.005  | 0.056  | 0.5500                |
| 0.6500                    | 0.154                          | 0.234  | 0.228  | 0.060  | 0.008  | -0.030 | -0.024 | -0.034 | -0.003 | 0.014  | 0.045  | 0.025  | 0.002  | -0.006 | 0.005  | 0.070  | 0.6500                |
| 0.7500                    | 0.212                          | 0.231  | 0.216  | 0.080  | 0.027  | -0.011 | -0.023 | -0.013 | 0.010  | 0.021  | 0.044  | 0.022  | -0.001 | -0.005 | 0.002  | 0.7500 |                       |
| 0.8500                    | 0.178                          | 0.233  | 0.231  | 0.064  | 0.010  | -0.032 | -0.043 | -0.026 | -0.010 | 0.009  | 0.038  | 0.022  | -0.004 | -0.005 | 0.004  | 0.067  | 0.8500                |
| 0.9500                    | 0.042                          | 0.262  | 0.311  | -0.261 | -0.083 | -0.077 | -0.057 | -0.037 | 0.027  | 0.055  | 0.023  | -0.006 | -0.006 | -0.005 | 0.006  | 0.058  | 0.9500                |
| M = 0.700      Q = 11.74  |                                |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | -0.120                         | 0.431  | -0.929 | -0.536 | -0.187 | -0.138 | -0.134 | -0.092 | -0.135 | -0.110 | -0.444 | -0.352 | -0.195 | -0.043 | -0.025 | 0.030  | 0.0500                |
| 0.1500                    | -0.109                         | -0.907 | -0.427 | -0.173 | -0.052 | -0.049 | -0.121 | -0.100 | -0.164 | -0.265 | -0.395 | -0.357 | -0.244 | -0.114 | -0.067 | 0.021  | 0.1500                |
| 0.2500                    | -0.057                         | -0.385 | -0.397 | -0.187 | -0.068 | -0.063 | -0.076 | -0.107 | -0.163 | -0.244 | -0.329 | -0.278 | -0.175 | -0.079 | -0.050 | 0.031  | 0.2500                |
| 0.3500                    | -0.093                         | -0.922 | -0.425 | -0.170 | -0.063 | -0.045 | -0.082 | -0.113 | -0.164 | -0.271 | -0.388 | -0.357 | -0.246 | -0.117 | -0.066 | 0.018  | 0.3500                |
| 0.4500                    | -0.123                         | 0.416  | -0.998 | -0.502 | -0.179 | -0.153 | -0.109 | -0.095 | -0.142 | -0.313 | -0.432 | -0.353 | -0.196 | -0.048 | -0.022 | 0.029  | 0.4500                |
| 0.5500                    | -0.007                         | 0.329  | 0.394  | -0.359 | -0.133 | -0.090 | -0.085 | -0.057 | 0.101  | 0.138  | 0.133  | 0.088  | 0.053  | 0.001  | -0.005 | 0.048  | 0.5500                |
| 0.6500                    | 0.202                          | 0.301  | 0.301  | 0.115  | 0.018  | -0.027 | -0.033 | -0.018 | 0.047  | 0.084  | 0.114  | 0.088  | 0.048  | 0.006  | 0.003  | 0.061  | 0.6500                |
| 0.7500                    | 0.314                          | 0.313  | 0.303  | 0.142  | 0.057  | 0.025  | 0.015  | 0.022  | 0.073  | 0.100  | 0.117  | 0.086  | 0.047  | 0.009  | 0.002  | 0.7500 |                       |
| 0.8500                    | 0.218                          | 0.298  | 0.305  | 0.122  | 0.032  | -0.025 | -0.036 | -0.011 | 0.039  | 0.080  | 0.107  | 0.084  | 0.041  | 0.005  | 0.000  | 0.061  | 0.8500                |
| 0.9500                    | -0.005                         | 0.303  | 0.412  | -0.273 | -0.116 | -0.087 | -0.076 | -0.061 | 0.090  | 0.133  | 0.127  | 0.081  | 0.040  | 0.002  | -0.003 | 0.048  | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

NO

| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 0.699      Q = 15.76     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.226 | 0.482  | -1.010 | -0.917 | -0.422 | -0.180 | -0.131 | -0.124 | -0.295 | -0.194 | -0.590 | -0.413 | -0.191 | -0.072 | -0.078 | -0.027 | 0.0500                |
| 0.1500                       | -0.145 | -1.072 | -0.440 | -0.246 | -0.104 | -0.094 | -0.162 | -0.194 | -0.268 | -0.396 | -0.525 | -0.442 | -0.267 | -0.140 | -0.092 | -0.008 | 0.1500                |
| 0.2500                       | -0.118 | -0.535 | -0.472 | -0.240 | -0.120 | -0.098 | -0.152 | -0.183 | -0.248 | -0.357 | -0.446 | -0.350 | -0.210 | -0.121 | -0.092 | -0.009 | 0.2500                |
| 0.3500                       | -0.146 | -1.070 | -0.462 | -0.253 | -0.104 | -0.098 | -0.163 | -0.192 | -0.261 | -0.398 | -0.515 | -0.433 | -0.264 | -0.137 | -0.088 | -0.007 | 0.3500                |
| 0.4500                       | -0.211 | 0.472  | -1.069 | -0.926 | -0.377 | -0.157 | -0.133 | -0.117 | -0.299 | -0.483 | -0.566 | -0.414 | -0.191 | -0.077 | -0.066 | -0.022 | 0.4500                |
| 0.5500                       | -0.090 | 0.370  | 0.496  | -0.445 | -0.254 | -0.107 | -0.106 | -0.103 | 0.186  | 0.253  | 0.223  | 0.162  | 0.099  | -0.005 | -0.028 | 0.024  | 0.5500                |
| 0.6500                       | 0.249  | 0.355  | 0.386  | 0.166  | -0.002 | -0.028 | -0.025 | 0.014  | 0.099  | 0.167  | 0.205  | 0.166  | 0.096  | 0.008  | -0.015 | 0.039  | 0.6500                |
| 0.7500                       | 0.420  | 0.423  | 0.404  | 0.200  | 0.086  | 0.063  | 0.067  | 0.110  | 0.166  | 0.197  | 0.211  | 0.163  | 0.098  | 0.021  | -0.008 | 0.7500 |                       |
| 0.8500                       | 0.313  | 0.367  | 0.393  | 0.170  | -0.002 | -0.025 | -0.015 | 0.011  | 0.087  | 0.162  | 0.197  | 0.161  | 0.090  | 0.010  | -0.020 | 0.037  | 0.8500                |
| 0.9500                       | -0.082 | 0.349  | 0.492  | -0.307 | -0.261 | -0.103 | -0.098 | -0.084 | 0.174  | 0.254  | 0.215  | 0.151  | 0.085  | -0.005 | -0.029 | 0.023  | 0.9500                |
| M = 0.903      Q = 03.78     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.055  | 0.319  | -0.193 | -0.328 | -0.011 | -0.070 | -0.064 | -0.059 | 0.088  | 0.032  | -0.218 | -0.238 | -0.212 | -0.051 | -0.016 | 0.057  | 0.0500                |
| 0.1500                       | 0.043  | -0.162 | -0.194 | -0.253 | -0.041 | -0.046 | -0.054 | -0.050 | 0.002  | -0.003 | -0.184 | -0.223 | -0.196 | -0.078 | -0.025 | 0.057  | 0.1500                |
| 0.2500                       | 0.038  | -0.132 | -0.208 | -0.234 | -0.050 | -0.036 | -0.056 | -0.043 | -0.013 | -0.028 | -0.171 | -0.215 | -0.187 | -0.086 | -0.028 | 0.053  | 0.2500                |
| 0.3500                       | 0.037  | -0.170 | -0.200 | -0.246 | -0.053 | -0.036 | -0.058 | -0.045 | 0.003  | -0.013 | -0.179 | -0.221 | -0.190 | -0.080 | -0.025 | 0.057  | 0.3500                |
| 0.4500                       | 0.054  | 0.299  | -0.227 | -0.313 | -0.021 | -0.055 | -0.065 | -0.055 | 0.101  | 0.059  | -0.194 | -0.233 | -0.201 | -0.055 | -0.014 | 0.058  | 0.4500                |
| 0.5500                       | 0.091  | 0.238  | 0.207  | -0.349 | -0.088 | -0.079 | -0.067 | -0.052 | -0.096 | -0.210 | -0.060 | -0.057 | -0.058 | -0.026 | -0.011 | 0.061  | 0.5500                |
| 0.6500                       | 0.130  | 0.180  | 0.161  | -0.032 | -0.013 | -0.068 | -0.070 | -0.059 | -0.071 | -0.136 | -0.070 | -0.061 | -0.066 | -0.040 | -0.017 | 0.067  | 0.6500                |
| 0.7500                       | 0.152  | 0.169  | 0.147  | -0.005 | -0.016 | -0.057 | -0.065 | -0.054 | -0.068 | -0.117 | -0.070 | -0.061 | -0.066 | -0.039 | -0.021 | 0.7500 |                       |
| 0.8500                       | 0.139  | 0.175  | 0.159  | -0.019 | -0.012 | -0.059 | -0.077 | -0.056 | -0.076 | -0.136 | -0.080 | -0.063 | -0.072 | -0.038 | -0.017 | 0.067  | 0.8500                |
| 0.9500                       | 0.097  | 0.218  | 0.220  | -0.301 | -0.080 | -0.085 | -0.069 | -0.054 | -0.101 | -0.216 | -0.072 | -0.060 | -0.070 | -0.024 | -0.008 | 0.063  | 0.9500                |
| M = 0.951      Q = 03.82     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.073  | 0.344  | -0.162 | -0.302 | -0.353 | -0.057 | -0.080 | -0.059 | 0.100  | 0.029  | -0.206 | -0.267 | -0.269 | -0.122 | 0.009  | 0.083  | 0.0500                |
| 0.1500                       | 0.063  | -0.129 | -0.194 | -0.233 | -0.327 | -0.027 | -0.056 | -0.045 | 0.018  | 0.016  | -0.173 | -0.256 | -0.269 | -0.202 | 0.012  | 0.087  | 0.1500                |
| 0.2500                       | 0.060  | -0.099 | -0.187 | -0.220 | -0.291 | -0.024 | -0.045 | -0.034 | 0.001  | -0.008 | -0.155 | -0.255 | -0.271 | -0.225 | 0.012  | 0.085  | 0.2500                |
| 0.3500                       | 0.059  | -0.134 | -0.188 | -0.229 | -0.329 | -0.023 | -0.048 | -0.036 | 0.018  | 0.007  | -0.160 | -0.261 | -0.258 | -0.211 | 0.014  | 0.087  | 0.3500                |
| 0.4500                       | 0.070  | 0.326  | -0.197 | -0.287 | -0.327 | -0.053 | -0.051 | -0.047 | 0.107  | 0.068  | -0.173 | -0.275 | -0.249 | -0.135 | 0.011  | 0.081  | 0.4500                |
| 0.5500                       | 0.107  | 0.264  | 0.229  | -0.308 | -0.177 | -0.138 | -0.056 | -0.044 | -0.064 | -0.199 | -0.056 | -0.075 | -0.099 | -0.076 | 0.007  | 0.087  | 0.5500                |
| 0.6500                       | 0.148  | 0.204  | 0.185  | -0.020 | -0.078 | -0.106 | -0.070 | -0.046 | -0.046 | -0.129 | -0.061 | -0.077 | -0.109 | -0.078 | -0.004 | 0.092  | 0.6500                |
| 0.7500                       | 0.165  | 0.191  | 0.176  | -0.001 | -0.074 | -0.092 | -0.065 | -0.042 | -0.046 | -0.115 | -0.059 | -0.078 | -0.108 | -0.072 | -0.010 | 0.7500 |                       |
| 0.8500                       | 0.160  | 0.198  | 0.184  | -0.022 | -0.076 | -0.097 | -0.077 | -0.041 | -0.050 | -0.133 | -0.069 | -0.079 | -0.115 | -0.068 | -0.006 | 0.093  | 0.8500                |
| 0.9500                       | 0.104  | 0.243  | 0.245  | -0.257 | -0.190 | -0.134 | -0.069 | -0.042 | -0.069 | -0.206 | -0.067 | -0.077 | -0.114 | -0.061 | 0.007  | 0.090  | 0.9500                |
| M = 1.004      Q = 03.93     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.137  | 0.395  | -0.094 | -0.219 | -0.326 | -0.080 | -0.076 | -0.082 | 0.127  | 0.058  | -0.117 | -0.201 | -0.231 | -0.238 | -0.123 | 0.050  | 0.0500                |
| 0.1500                       | 0.124  | -0.054 | -0.116 | -0.158 | -0.242 | -0.029 | -0.053 | -0.081 | 0.060  | 0.085  | -0.089 | -0.190 | -0.241 | -0.293 | -0.135 | 0.066  | 0.1500                |
| 0.2500                       | 0.123  | -0.028 | -0.111 | -0.141 | -0.210 | -0.015 | -0.054 | -0.077 | 0.050  | 0.063  | -0.071 | -0.191 | -0.241 | -0.284 | -0.141 | 0.066  | 0.2500                |
| 0.3500                       | 0.123  | -0.054 | -0.119 | -0.154 | -0.245 | -0.019 | -0.057 | -0.079 | 0.061  | 0.075  | -0.079 | -0.196 | -0.231 | -0.301 | -0.131 | 0.066  | 0.3500                |
| 0.4500                       | 0.134  | 0.379  | -0.124 | -0.208 | -0.317 | -0.057 | -0.057 | -0.086 | 0.135  | 0.130  | -0.091 | -0.210 | -0.210 | -0.263 | -0.117 | 0.052  | 0.4500                |
| 0.5500                       | 0.181  | 0.324  | 0.282  | -0.218 | -0.130 | -0.129 | -0.069 | -0.075 | -0.035 | -0.137 | 0.019  | -0.022 | -0.061 | -0.145 | -0.120 | 0.054  | 0.5500                |
| 0.6500                       | 0.192  | 0.259  | 0.243  | 0.052  | -0.017 | -0.088 | -0.081 | -0.075 | -0.023 | -0.074 | 0.015  | -0.024 | -0.067 | -0.115 | -0.132 | 0.054  | 0.6500                |
| 0.7500                       | 0.214  | 0.251  | 0.238  | 0.068  | -0.014 | -0.081 | -0.085 | -0.068 | -0.023 | -0.060 | 0.017  | -0.024 | -0.065 | -0.101 | -0.135 | 0.7500 |                       |
| 0.8500                       | 0.215  | 0.259  | 0.241  | 0.056  | -0.024 | -0.087 | -0.089 | -0.068 | -0.028 | -0.078 | 0.007  | -0.025 | -0.072 | -0.107 | -0.135 | 0.053  | 0.8500                |
| 0.9500                       | 0.169  | 0.298  | 0.297  | -0.174 | -0.142 | -0.139 | -0.082 | -0.065 | -0.042 | -0.145 | 0.010  | -0.023 | -0.077 | -0.125 | -0.121 | 0.053  | 0.9500                |
| M = 1.050      Q = 03.93     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.122  | 0.430  | -0.031 | -0.126 | -0.222 | 0.005  | -0.015 | -0.049 | 0.093  | 0.020  | -0.140 | -0.176 | -0.183 | -0.201 | -0.130 | -0.007 | 0.0500                |
| 0.1500                       | 0.114  | 0.002  | -0.062 | -0.063 | -0.157 | 0.038  | -0.002 | -0.055 | 0.000  | 0.029  | -0.108 | -0.175 | -0.185 | -0.245 | -0.157 | 0.005  | 0.1500                |
| 0.2500                       | 0.112  | 0.025  | -0.043 | -0.046 | -0.131 | 0.052  | -0.001 | -0.053 | -0.033 | 0.013  | -0.094 | -0.181 | -0.180 | -0.238 | -0.177 | 0.004  | 0.2500                |
| 0.3500                       | 0.113  | -0.008 | -0.058 | -0.064 | -0.156 | 0.046  | -0.006 | -0.055 | -0.001 | 0.024  | -0.099 | -0.179 | -0.190 | -0.256 | -0.153 | 0.005  | 0.3500                |
| 0.4500                       | 0.115  | 0.415  | -0.061 | -0.117 | -0.212 | 0.017  | -0.006 | -0.056 | 0.104  | 0.072  | -0.123 | -0.178 | -0.179 | -0.221 | -0.127 | -0.005 | 0.4500                |
| 0.5500                       | 0.152  | 0.377  | 0.328  | -0.131 | -0.033 | -0.051 | -0.014 | -0.047 | -0.029 | -0.151 | -0.052 | -0.037 | -0.040 | -0.098 | -0.111 | -0.003 | 0.5500                |
| 0.6500                       | 0.189  | 0.298  | 0.287  | 0.125  | 0.076  | -0.002 | -0.020 | -0.039 | -0.021 | -0.094 | -0.075 | -0.040 | -0.038 | -0.067 | -0.098 | -0.018 | 0.6500                |
| 0.7500                       | 0.208  | 0.289  | 0.284  | 0.144  | 0.083  | 0.011  | -0.016 | -0.025 | -0.041 | -0.078 | -0.083 | -0.039 | -0.032 | -0.053 | -0.095 | 0.7500 |                       |
| 0.8500                       | 0.198  | 0.292  | 0.293  | 0.128  | 0.069  | -0.001 | -0.021 | -0.033 | -0.028 | -0.093 | -0.086 | -0.042 | -0.040 | -0.064 | -0.099 | -0.019 | 0.8500                |
| 0.9500                       | 0.158  | 0.348  | 0.327  | -0.089 | -0.044 | -0.050 | -0.021 | -0.039 | -0.036 | -0.155 | -0.059 | -0.043 | -0.046 | -0.085 | -0.107 | -0.004 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

| Fraction of body length, x/l |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050 | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$ | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 1.099 $\alpha = 03.93$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.087 | 0.413  | -0.062 | -0.135 | -0.243 | -0.039 | -0.019 | -0.047 | 0.191  | -0.014 | -0.029 | -0.162 | -0.221 | -0.163 | -0.056 | 0.057  | 0.0500                |
| 0.1500                       | 0.077 | -0.019 | -0.099 | -0.092 | -0.141 | 0.005  | 0.002  | -0.034 | 0.102  | 0.168  | -0.016 | -0.153 | -0.198 | -0.173 | -0.090 | 0.058  | 0.1500                |
| 0.2500                       | 0.076 | 0.004  | -0.087 | -0.079 | -0.110 | 0.032  | 0.005  | -0.029 | 0.072  | 0.147  | -0.001 | -0.154 | -0.190 | -0.159 | -0.122 | 0.053  | 0.2500                |
| 0.3500                       | 0.075 | -0.032 | -0.101 | -0.094 | -0.140 | 0.002  | 0.003  | -0.026 | 0.100  | 0.155  | -0.009 | -0.157 | -0.195 | -0.187 | -0.089 | 0.059  | 0.3500                |
| 0.4500                       | 0.090 | 0.391  | -0.096 | -0.122 | -0.244 | -0.039 | -0.010 | -0.039 | 0.204  | 0.211  | -0.035 | -0.168 | -0.202 | -0.189 | -0.054 | 0.059  | 0.4500                |
| 0.5500                       | 0.120 | 0.366  | 0.304  | -0.112 | -0.157 | -0.093 | -0.028 | -0.028 | 0.019  | -0.058 | 0.064  | 0.000  | -0.057 | -0.086 | -0.045 | 0.071  | 0.5500                |
| 0.6500                       | 0.156 | 0.272  | 0.284  | 0.154  | -0.002 | -0.039 | -0.048 | -0.034 | 0.021  | 0.012  | 0.056  | 0.000  | -0.061 | -0.061 | -0.039 | 0.071  | 0.6500                |
| 0.7500                       | 0.179 | 0.260  | 0.265  | 0.170  | -0.020 | -0.035 | -0.054 | -0.034 | 0.001  | 0.030  | 0.058  | 0.002  | -0.059 | -0.052 | -0.045 |        | 0.7500                |
| 0.8500                       | 0.167 | 0.266  | 0.276  | 0.159  | 0.002  | -0.046 | -0.058 | -0.032 | 0.012  | 0.014  | 0.048  | 0.001  | -0.066 | -0.061 | -0.039 | 0.072  | 0.8500                |
| 0.9500                       | 0.116 | 0.338  | 0.329  | -0.068 | -0.156 | -0.096 | -0.046 | -0.032 | 0.011  | -0.055 | 0.060  | -0.001 | -0.075 | -0.070 | -0.038 | 0.072  | 0.9500                |
| M = 1.300 $\alpha = -04.08$  |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.113 | 0.129  | 0.033  | -0.005 | -0.114 | 0.037  | -0.023 | -0.012 | 0.143  | -0.105 | 0.053  | 0.017  | -0.026 | -0.021 | -0.054 | -0.043 | 0.0500                |
| 0.1500                       | 0.143 | 0.111  | 0.048  | 0.034  | 0.007  | -0.035 | 0.010  | 0.011  | -0.008 | 0.060  | 0.051  | 0.018  | -0.012 | 0.005  | -0.042 | -0.053 | 0.1500                |
| 0.2500                       | 0.171 | 0.101  | 0.073  | 0.045  | 0.032  | -0.015 | 0.023  | 0.019  | 0.010  | 0.030  | 0.050  | 0.016  | -0.013 | 0.021  | -0.035 | 0.061  | 0.2500                |
| 0.3500                       | 0.163 | 0.093  | 0.070  | 0.038  | 0.012  | -0.029 | 0.006  | 0.013  | 0.009  | 0.061  | 0.052  | 0.019  | -0.016 | -0.006 | -0.043 | -0.057 | 0.3500                |
| 0.4500                       | 0.127 | 0.141  | 0.034  | -0.008 | -0.118 | 0.032  | -0.024 | -0.020 | 0.139  | 0.100  | 0.045  | 0.019  | -0.017 | -0.044 | -0.052 | -0.049 | 0.4500                |
| 0.5500                       | 0.101 | 0.129  | 0.061  | -0.026 | -0.012 | -0.017 | -0.030 | -0.027 | -0.021 | -0.104 | -0.090 | -0.114 | -0.133 | -0.123 | -0.072 | -0.046 | 0.5500                |
| 0.6500                       | 0.085 | 0.057  | 0.067  | 0.042  | -0.053 | -0.015 | -0.021 | -0.031 | -0.024 | -0.049 | -0.086 | -0.113 | -0.129 | -0.133 | -0.093 | -0.018 | 0.6500                |
| 0.7500                       | 0.082 | 0.053  | 0.061  | 0.044  | -0.052 | 0.006  | -0.016 | -0.028 | -0.032 | -0.032 | -0.074 | -0.106 | -0.123 | -0.135 | -0.119 |        | 0.7500                |
| 0.8500                       | 0.084 | 0.058  | 0.065  | 0.038  | -0.060 | -0.012 | -0.017 | -0.022 | -0.027 | -0.053 | -0.082 | -0.116 | -0.133 | -0.140 | -0.090 | -0.015 | 0.8500                |
| 0.9500                       | 0.089 | 0.084  | 0.065  | -0.025 | -0.028 | -0.010 | -0.029 | -0.028 | -0.032 | -0.099 | -0.095 | -0.133 | -0.142 | -0.125 | -0.069 | -0.026 | 0.9500                |
| M = 1.303 $\alpha = -00.10$  |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.108 | 0.259  | 0.031  | -0.050 | -0.115 | 0.053  | -0.014 | -0.007 | 0.137  | -0.108 | 0.001  | -0.046 | -0.091 | -0.088 | -0.068 | -0.044 | 0.0500                |
| 0.1500                       | 0.114 | 0.038  | 0.002  | -0.021 | -0.104 | -0.030 | -0.001 | 0.002  | -0.001 | 0.050  | 0.015  | -0.037 | -0.077 | -0.070 | -0.082 | -0.059 | 0.1500                |
| 0.2500                       | 0.118 | 0.048  | 0.014  | -0.015 | -0.035 | -0.060 | 0.019  | 0.009  | 0.001  | 0.031  | 0.025  | -0.039 | -0.075 | -0.054 | -0.093 | -0.067 | 0.2500                |
| 0.3500                       | 0.124 | 0.033  |        | -0.019 | -0.033 | -0.009 | 0.009  | 0.012  | 0.006  | 0.051  | 0.013  | -0.037 | -0.081 | -0.077 | -0.087 | -0.059 | 0.3500                |
| 0.4500                       | 0.122 | 0.248  | 0.013  | -0.038 | -0.122 | 0.045  | -0.011 | 0.001  | 0.137  | 0.099  | -0.011 | -0.037 | -0.082 | -0.113 | -0.070 | -0.050 | 0.4500                |
| 0.5500                       | 0.123 | 0.212  | 0.169  | -0.036 | -0.119 | -0.033 | -0.024 | -0.019 | 0.011  | -0.091 | -0.048 | -0.061 | -0.071 | -0.069 | -0.073 | -0.055 | 0.5500                |
| 0.6500                       | 0.122 | 0.126  | 0.153  | 0.117  | -0.079 | 0.007  | -0.022 | -0.024 | -0.018 | -0.044 | -0.051 | -0.055 | -0.066 | -0.061 | -0.078 | -0.042 | 0.6500                |
| 0.7500                       | 0.118 | 0.101  | 0.135  | 0.117  | -0.002 | 0.023  | -0.025 | -0.026 | -0.028 | -0.020 | -0.055 | -0.053 | -0.067 | -0.067 | -0.086 |        | 0.7500                |
| 0.8500                       | 0.117 | 0.121  | 0.162  | 0.121  | 0.005  | 0.005  | -0.029 | -0.029 | -0.024 | -0.037 | -0.053 | -0.060 | -0.068 | -0.069 | -0.072 | -0.039 | 0.8500                |
| 0.9500                       | 0.114 | 0.152  | 0.177  | -0.001 | -0.098 | -0.041 | -0.029 | -0.021 | 0.000  | -0.088 | -0.053 | -0.070 | -0.083 | -0.076 | -0.067 | -0.039 | 0.9500                |
| M = 1.304 $\alpha = 03.78$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.099 | 0.361  | -0.039 | -0.092 | -0.149 | 0.052  | -0.007 | -0.025 | 0.115  | -0.111 | -0.030 | -0.100 | -0.144 | -0.127 | -0.079 | -0.040 | 0.0500                |
| 0.1500                       | 0.085 | -0.010 | -0.086 | -0.066 | -0.091 | 0.005  |        | -0.016 | -0.008 | 0.046  | -0.001 | -0.092 | -0.128 | -0.116 | -0.109 | -0.043 | 0.1500                |
| 0.2500                       | 0.085 | 0.008  | -0.051 | -0.063 | -0.076 | 0.097  | 0.014  | 0.002  | 0.017  | 0.024  | 0.021  | -0.091 | -0.125 | -0.093 | -0.132 | -0.055 | 0.2500                |
| 0.3500                       | 0.085 | -0.010 | -0.091 | -0.071 | -0.079 | 0.017  | 0.017  | -0.004 | 0.000  | 0.049  | -0.002 | -0.088 | -0.130 | -0.122 | -0.111 | -0.041 | 0.3500                |
| 0.4500                       | 0.096 | 0.352  | -0.069 | -0.091 | -0.142 | 0.044  | 0.011  | -0.023 | 0.120  | 0.075  | -0.039 | -0.092 | -0.141 | -0.150 | -0.081 | -0.038 | 0.4500                |
| 0.5500                       | 0.131 | 0.257  | 0.266  | -0.021 | -0.078 | -0.059 | -0.013 | -0.027 | 0.018  | -0.082 |        | 0.008  | -0.003 | -0.020 | -0.075 | -0.046 | 0.5500                |
| 0.6500                       | 0.155 | 0.167  | 0.247  | 0.204  | 0.054  | 0.023  | -0.040 | -0.038 | -0.020 | -0.029 | -0.063 | 0.018  | 0.004  | 0.005  | -0.056 | -0.074 | 0.6500                |
| 0.7500                       | 0.175 | 0.133  | 0.237  | 0.206  | 0.070  | 0.017  | -0.048 | -0.024 | -0.014 | -0.019 | -0.060 | 0.019  | 0.002  | -0.004 | -0.041 |        | 0.7500                |
| 0.8500                       | 0.163 | 0.163  | 0.250  | 0.207  | 0.058  | 0.020  | -0.051 | -0.028 | -0.017 | -0.027 | -0.075 | 0.010  |        | -0.007 | -0.047 | -0.071 | 0.8500                |
| 0.9500                       | 0.125 | 0.185  | 0.290  | 0.023  | -0.077 | -0.054 | -0.030 | -0.026 | 0.003  | -0.084 | 0.001  | 0.004  | -0.011 | -0.027 | -0.063 | -0.043 | 0.9500                |
| M = 1.303 $\alpha = 07.81$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.052 | 0.491  | -0.205 | -0.175 | -0.216 | 0.043  | -0.039 | -0.013 | 0.020  | -0.158 | -0.148 | -0.169 | -0.212 | -0.089 | -0.079 | -0.019 | 0.0500                |
| 0.1500                       | 0.044 | -0.053 | -0.107 | -0.170 | -0.135 | 0.041  | -0.019 | -0.008 | -0.069 | -0.027 | -0.095 | -0.167 | -0.190 | -0.138 | -0.115 | -0.028 | 0.1500                |
| 0.2500                       | 0.050 | -0.032 | -0.109 | -0.118 | -0.127 | -0.125 | 0.014  | -0.005 | -0.055 | -0.034 | -0.070 | -0.145 | -0.171 | -0.179 | -0.117 | -0.097 | 0.2500                |
| 0.3500                       | 0.047 | -0.074 | -0.110 | -0.116 | -0.129 | 0.029  | -0.004 | -0.008 | -0.053 | -0.022 | -0.093 | -0.156 | -0.192 | -0.131 | -0.127 | -0.033 | 0.3500                |
| 0.4500                       | 0.054 | 0.476  | -0.246 | -0.141 | -0.211 | 0.039  | -0.038 | -0.014 | 0.008  | -0.028 | -0.151 | -0.171 | -0.202 | -0.109 | -0.083 | -0.022 | 0.4500                |
| 0.5500                       | 0.117 | 0.378  | 0.385  | 0.027  | -0.032 | -0.022 | -0.054 | -0.021 | 0.061  | 0.028  | 0.075  | 0.079  | 0.068  | 0.032  | -0.042 | -0.038 | 0.5500                |
| 0.6500                       | 0.203 | 0.214  | 0.373  | 0.310  | 0.112  | 0.036  | -0.062 | -0.031 | -0.015 | 0.015  | 0.060  | 0.077  | 0.069  | 0.060  | 0.003  | -0.059 | 0.6500                |
| 0.7500                       | 0.249 | 0.192  | 0.355  | 0.314  | 0.134  | 0.021  | -0.045 | -0.030 | 0.009  | 0.014  | 0.051  | 0.077  | 0.073  | 0.055  | 0.026  |        | 0.7500                |
| 0.8500                       | 0.208 | 0.198  | 0.366  | 0.313  | 0.114  | 0.034  | -0.082 | -0.036 | -0.018 | 0.016  | 0.062  | 0.076  | 0.065  | 0.047  | 0.002  | -0.046 | 0.8500                |
| 0.9500                       | 0.106 | 0.286  | 0.412  | 0.076  | -0.057 | -0.034 | -0.062 | -0.015 | -0.048 | 0.023  | 0.077  | 0.070  | 0.056  | 0.031  | -0.034 | -0.021 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

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| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990                 |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $\frac{\theta}{2\pi}$ |
| M = 1.300 Q = 11.89          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.020 | 0.623  | -0.347 | -0.312 | -0.323 | -0.015 | -0.139 | -0.016 | -0.023 | -0.197 | -0.202 | -0.246 | -0.274 | -0.094 | -0.099 | -0.059                |
| 0.1500                       | -0.008 | -0.152 | -0.161 | -0.138 | -0.146 | 0.024  | -0.065 | -0.039 | -0.086 | -0.097 | -0.183 | -0.251 | -0.277 | -0.162 | -0.083 | -0.027                |
| 0.2500                       | 0.012  | -0.030 | -0.181 | -0.139 | -0.144 | -0.172 | 0.025  | -0.043 | -0.075 | -0.081 | -0.154 | -0.212 | -0.239 | -0.245 | -0.058 | -0.110                |
| 0.3500                       | -0.004 | -0.262 | -0.164 | -0.130 | -0.145 | 0.024  | -0.067 | -0.040 | -0.071 | -0.105 | -0.186 | -0.238 | -0.281 | -0.159 | -0.090 | -0.027                |
| 0.4500                       | -0.021 | 0.605  | -0.359 | -0.317 | -0.300 | -0.024 | -0.122 | -0.106 | -0.031 | -0.141 | -0.198 | -0.239 | -0.267 | -0.104 | -0.108 | -0.066                |
| 0.5500                       | 0.076  | 0.499  | 0.504  | 0.063  | -0.090 | -0.054 | -0.122 | -0.106 | -0.031 | -0.141 | -0.198 | -0.239 | -0.267 | -0.104 | -0.108 | -0.066                |
| 0.6500                       | 0.237  | 0.281  | 0.472  | 0.386  | 0.163  | -0.026 | -0.095 | -0.040 | 0.090  | 0.118  | 0.153  | 0.165  | 0.168  | 0.102  | -0.031 | -0.065                |
| 0.7500                       | 0.310  | 0.259  | 0.459  | 0.401  | 0.215  | 0.029  | -0.001 | -0.018 | 0.030  | 0.023  | 0.149  | 0.163  | 0.163  | 0.144  | 0.038  | -0.050                |
| 0.8500                       | 0.261  | 0.272  | 0.477  | 0.386  | 0.178  | -0.027 | -0.095 | -0.033 | -0.030 | 0.055  | 0.152  | 0.163  | 0.160  | 0.132  | 0.044  | -0.036                |
| 0.9500                       | 0.075  | 0.470  | 0.528  | 0.125  | -0.065 | -0.068 | -0.124 | -0.103 | 0.067  | 0.118  | 0.152  | 0.151  | 0.146  | 0.111  | -0.019 | -0.050                |
| M = 1.299 Q = 15.72          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.093 | 0.792  | -0.446 | -0.455 | -0.444 | -0.064 | -0.116 | -0.072 | -0.088 | -0.215 | -0.257 | -0.281 | -0.319 | -0.069 | -0.002 | 0.027                 |
| 0.1500                       | -0.068 | -0.220 | -0.135 | -0.142 | -0.184 | 0.013  | -0.092 | -0.082 | -0.103 | -0.132 | -0.250 | -0.291 | -0.320 | -0.110 | 0.004  | 0.049                 |
| 0.2500                       | 0.011  | -0.008 | -0.206 | -0.145 | -0.149 | -0.078 | -0.036 | -0.079 | -0.121 | -0.094 | -0.209 | -0.258 | -0.286 | -0.291 | 0.053  | 0.029                 |
| 0.3500                       | -0.050 | -0.232 | -0.147 | -0.140 | -0.182 | 0.014  | -0.053 | -0.113 | -0.108 | -0.141 | -0.246 | -0.286 | -0.326 | -0.115 | 0.007  | 0.049                 |
| 0.4500                       | -0.100 | 0.776  | -0.457 | -0.443 | -0.421 | -0.092 | -0.103 | -0.085 | -0.103 | -0.195 | -0.250 | -0.279 | -0.313 | -0.090 | -0.004 | 0.026                 |
| 0.5500                       | 0.041  | 0.617  | 0.637  | 0.098  | -0.264 | -0.111 | -0.096 | -0.058 | 0.138  | 0.202  | 0.267  | 0.256  | 0.263  | 0.184  | 0.069  | 0.041                 |
| 0.6500                       | 0.290  | 0.413  | 0.596  | 0.454  | 0.244  | -0.055 | -0.089 | -0.034 | 0.023  | 0.142  | 0.282  | 0.267  | 0.271  | 0.232  | 0.149  | 0.060                 |
| 0.7500                       | 0.410  | 0.413  | 0.591  | 0.477  | 0.348  | 0.081  | 0.016  | 0.011  | 0.091  | 0.091  | 0.285  | 0.268  | 0.273  | 0.244  | 0.212  | 0.7500                |
| 0.8500                       | 0.308  | 0.412  | 0.600  | 0.457  | 0.254  | -0.045 | -0.086 | -0.024 | 0.017  | 0.139  | 0.277  | 0.270  | 0.269  | 0.229  | 0.167  | 0.072                 |
| 0.9500                       | 0.049  | 0.588  | 0.653  | 0.162  | -0.239 | -0.131 | -0.131 | -0.053 | 0.121  | 0.197  | 0.255  | 0.250  | 0.250  | 0.194  | 0.085  | 0.040                 |
| M = 1.503 Q = 03.78          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.091  | 0.367  | -0.034 | -0.074 | -0.102 | 0.116  | -0.008 | -0.030 | 0.088  | -0.089 | -0.012 | -0.079 | -0.118 | -0.088 | -0.067 | -0.064                |
| 0.1500                       | 0.081  | 0.001  | -0.047 | -0.053 | -0.056 | -0.074 | -0.007 | -0.007 | 0.006  | -0.007 | 0.016  | -0.077 | -0.108 | -0.084 | -0.088 | -0.074                |
| 0.2500                       | 0.075  | 0.016  | -0.060 | -0.052 | -0.051 | -0.063 | 0.001  | 0.004  | -0.015 | 0.001  | 0.031  | -0.075 | -0.099 | -0.120 | -0.086 | -0.081                |
| 0.3500                       | 0.074  | -0.010 | -0.090 | -0.056 | -0.058 | -0.063 | -0.005 | 0.000  | -0.002 | 0.018  | 0.011  | -0.077 | -0.106 | -0.080 | -0.089 | -0.077                |
| 0.4500                       | 0.091  | 0.356  | -0.053 | -0.071 | -0.090 | 0.114  | -0.009 | -0.021 | 0.074  | 0.047  | -0.026 | -0.077 | -0.109 | -0.110 | -0.059 | -0.062                |
| 0.5500                       | 0.117  | 0.193  | 0.254  | 0.005  | -0.097 | -0.008 | -0.048 | -0.010 | 0.014  | -0.052 | -0.027 | 0.013  | 0.005  | -0.013 | -0.043 | -0.069                |
| 0.6500                       | 0.145  | 0.129  | 0.219  | 0.187  | 0.075  | 0.048  | -0.030 | -0.024 | -0.027 | -0.018 | -0.061 | 0.003  | 0.008  | -0.007 | -0.019 | -0.059                |
| 0.7500                       | 0.157  | 0.099  | 0.172  | 0.184  | 0.118  | 0.034  | 0.008  | -0.045 | -0.022 | -0.016 | -0.040 | 0.007  | 0.006  | -0.013 | -0.018 | 0.7500                |
| 0.8500                       | 0.154  | 0.130  | 0.216  | 0.179  | 0.077  | 0.049  | -0.024 | -0.025 | -0.033 | -0.014 | -0.060 | -0.001 | 0.004  | -0.013 | -0.032 | -0.048                |
| 0.9500                       | 0.114  | 0.154  | 0.254  | 0.048  | -0.101 | -0.004 | -0.047 | -0.019 | 0.008  | -0.065 | -0.013 |        | -0.006 | -0.019 | -0.045 | -0.072                |
| M = 1.703 Q = 03.73          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.089  | 0.384  | -0.044 | -0.049 | -0.068 | 0.103  | 0.013  | -0.015 | 0.063  | -0.052 | -0.036 | -0.080 | -0.100 | -0.088 | -0.058 | -0.070                |
| 0.1500                       | 0.073  | 0.005  | -0.044 | -0.051 | -0.049 | -0.062 | 0.013  | -0.018 | 0.006  | 0.015  | 0.012  | -0.068 | -0.095 | -0.117 | -0.086 | -0.074                |
| 0.2500                       | 0.065  | 0.011  | -0.018 | -0.039 | -0.046 | -0.051 | -0.054 | 0.013  | 0.013  | -0.023 | 0.025  | -0.055 | -0.096 | -0.115 | -0.104 | -0.068                |
| 0.3500                       | 0.061  | 0.008  | -0.040 | -0.042 | -0.052 | -0.059 | 0.006  | -0.013 | 0.013  | 0.013  | 0.008  | -0.062 | -0.098 | -0.116 | -0.082 | -0.075                |
| 0.4500                       | 0.081  | 0.373  | -0.052 | -0.044 | -0.072 | 0.101  | 0.002  | -0.007 | 0.048  | 0.053  | -0.041 | -0.075 | -0.099 | -0.092 | -0.052 | -0.068                |
| 0.5500                       | 0.108  | 0.206  | 0.273  | 0.016  | -0.071 | 0.039  | -0.036 | -0.019 | 0.025  | -0.042 | -0.035 | 0.005  | -0.012 | -0.022 | -0.038 | -0.060                |
| 0.6500                       | 0.149  | 0.143  | 0.199  | 0.187  | 0.100  | 0.043  | -0.008 | -0.032 | -0.023 | -0.027 | -0.055 | -0.002 | -0.008 | -0.012 | -0.028 | -0.049                |
| 0.7500                       | 0.166  | 0.126  | 0.154  | 0.177  | 0.153  | 0.052  | 0.029  | -0.019 | -0.024 | -0.021 | -0.032 | -0.010 | -0.003 | -0.016 | -0.026 | 0.7500                |
| 0.8500                       | 0.160  | 0.129  | 0.183  | 0.180  | 0.106  | 0.051  | -0.001 | -0.028 | -0.035 | -0.027 | -0.050 |        | 0.002  | -0.017 | -0.030 | -0.055                |
| 0.9500                       | 0.123  | 0.156  | 0.261  | 0.058  | -0.070 | 0.042  | -0.041 | -0.021 | 0.012  | -0.038 | -0.040 | 0.010  | -0.011 | -0.038 | -0.039 | -0.062                |
| M = 1.909 Q = 03.93          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.084  | 0.386  | -0.048 | -0.034 | -0.057 | -0.021 | 0.015  | 0.020  | 0.046  | -0.034 | -0.022 | -0.064 | -0.082 | -0.083 | -0.027 | -0.046                |
| 0.1500                       | 0.074  | 0.063  | -0.039 | -0.038 | -0.039 | -0.047 | 0.020  | 0.006  | 0.008  | 0.017  | 0.004  | -0.039 | -0.076 | -0.087 | -0.064 | -0.054                |
| 0.2500                       | 0.064  | 0.022  | -0.010 | -0.038 | -0.042 | -0.034 | -0.046 | 0.021  | 0.020  | -0.003 | 0.024  | -0.027 | -0.075 | -0.082 | -0.091 | -0.050                |
| 0.3500                       | 0.061  | -0.031 | -0.039 | -0.042 | -0.041 | 0.024  | 0.004  | 0.006  | 0.004  | 0.020  | 0.006  | -0.042 | -0.076 | -0.086 | -0.066 | -0.054                |
| 0.4500                       | 0.074  | 0.374  | -0.044 | -0.044 | -0.060 | -0.018 | 0.015  | 0.013  | 0.039  | 0.038  | 0.024  | -0.062 | -0.076 | -0.092 | -0.029 | -0.045                |
| 0.5500                       | 0.107  | 0.188  | 0.286  | 0.004  | -0.047 | 0.039  | -0.017 | 0.015  | 0.057  | -0.005 | -0.026 | 0.019  | -0.004 | 0.003  | -0.021 | -0.035                |
| 0.6500                       | 0.154  | 0.116  | 0.143  | 0.170  | 0.093  | 0.045  | 0.024  | -0.010 | 0.006  | 0.011  | -0.025 | 0.007  | 0.005  | -0.003 | -0.016 | -0.032                |
| 0.7500                       | 0.174  | 0.116  | 0.133  | 0.173  | 0.159  | 0.064  | 0.041  | 0.015  | -0.012 | -0.005 | 0.002  | -0.026 | 0.017  | 0.001  | -0.016 | 0.7500                |
| 0.8500                       | 0.165  | 0.113  | 0.131  | 0.170  | 0.097  | 0.057  | 0.033  | -0.019 | -0.002 | 0.003  | -0.022 | 0.004  | 0.007  | -0.002 | -0.027 | -0.033                |
| 0.9500                       | 0.114  | 0.124  | 0.273  | 0.042  | -0.050 | 0.046  | -0.009 | 0.009  | 0.042  |        | -0.025 | 0.019  | -0.002 | -0.008 | -0.023 | -0.038                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 2.235 $\alpha = -03.73$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.100  | 0.165  | 0.034  | 0.005  | -0.001 | -0.033 | 0.002  | 0.012  | 0.049  | 0.084  | 0.033  | 0.013  | 0.003  | 0.002  | -0.012 | -0.024 | 0.0500                |
| 0.1500                       | 0.140  | 0.072  | 0.056  | 0.036  | 0.025  | 0.020  | 0.007  | -0.001 | 0.006  | 0.004  | 0.026  | 0.026  | 0.005  | 0.000  | -0.017 | -0.011 | 0.1500                |
| 0.2500                       | 0.139  | 0.090  | 0.069  | 0.049  | 0.038  | 0.032  | 0.024  | 0.015  | -0.001 | -0.008 | 0.022  | 0.029  | 0.006  |        | -0.014 | -0.020 | 0.2500                |
| 0.3500                       | 0.128  | 0.068  | 0.056  | 0.035  | 0.026  | 0.020  | 0.014  | -0.004 | 0.017  | -0.001 | 0.030  | 0.022  | 0.004  | -0.002 | -0.020 | -0.013 | 0.3500                |
| 0.4500                       | 0.101  | 0.163  | 0.019  | 0.002  | -0.003 | -0.030 | -0.001 | 0.013  | 0.038  | 0.058  | 0.030  | 0.016  | 0.006  | -0.007 | -0.012 | -0.022 | 0.4500                |
| 0.5500                       | 0.074  | 0.152  | 0.077  | -0.006 | -0.023 | -0.003 | 0.006  | -0.014 | 0.002  | -0.033 | -0.049 | -0.046 | -0.053 | -0.049 | -0.031 | -0.035 | 0.5500                |
| 0.6500                       | 0.061  | 0.034  | 0.044  | 0.030  | 0.001  | 0.010  | 0.001  | -0.012 | -0.004 | -0.008 | -0.033 | -0.043 | -0.050 | -0.053 | -0.057 | -0.044 | 0.6500                |
| 0.7500                       | 0.058  | 0.029  | 0.034  | 0.050  | 0.029  | -0.001 | -0.004 | 0.000  | -0.007 | -0.013 | -0.012 | -0.040 | -0.049 | -0.050 | -0.063 |        | 0.7500                |
| 0.8500                       | 0.061  | 0.037  | 0.034  | 0.034  | 0.003  | 0.006  | 0.002  | -0.008 | -0.007 | -0.012 | -0.032 | -0.042 | -0.052 | -0.060 | -0.059 | -0.041 | 0.8500                |
| 0.9500                       | 0.071  | 0.059  | 0.082  | -0.005 | -0.018 | -0.003 | 0.007  | -0.004 | 0.001  | -0.035 | -0.048 | -0.045 | -0.047 | -0.061 | -0.033 | -0.038 | 0.9500                |
| M = 2.230 $\alpha = 00.20$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.092  | 0.265  | 0.019  | -0.014 | -0.020 | -0.041 | 0.043  | 0.008  | 0.045  | 0.086  | 0.010  | -0.028 | -0.034 | -0.036 | -0.023 | -0.033 | 0.0500                |
| 0.1500                       | 0.098  | 0.036  | 0.017  | 0.001  | -0.007 | -0.021 | -0.020 | 0.010  | -0.004 | 0.001  | 0.011  | -0.005 | -0.031 | -0.035 | -0.047 | -0.036 | 0.1500                |
| 0.2500                       | 0.092  | 0.052  | 0.019  | 0.001  | -0.002 | -0.009 | -0.014 | -0.015 | -0.012 | -0.007 | 0.017  | 0.007  | -0.028 | -0.034 | -0.048 | -0.050 | 0.2500                |
| 0.3500                       | 0.092  | 0.034  | 0.020  | 0.000  | -0.006 | -0.005 | -0.013 | 0.013  | 0.003  | -0.003 | 0.015  | -0.008 | -0.031 | -0.037 | -0.052 | -0.037 | 0.3500                |
| 0.4500                       | 0.094  | 0.257  | 0.015  | -0.017 | -0.026 | -0.015 | 0.033  | 0.008  | 0.034  | 0.040  | 0.003  | -0.022 | -0.030 | -0.045 | -0.023 | -0.033 | 0.4500                |
| 0.5500                       | 0.097  | 0.179  | 0.156  | -0.017 | -0.029 | -0.026 | 0.012  | -0.006 | 0.013  | -0.022 | -0.033 | -0.020 | -0.028 | -0.026 | -0.025 | -0.031 | 0.5500                |
| 0.6500                       | 0.099  | 0.060  | 0.073  | 0.032  | 0.044  | 0.009  | 0.017  | -0.008 | -0.009 | -0.003 | -0.033 | -0.027 | -0.029 | -0.028 | -0.037 | -0.038 | 0.6500                |
| 0.7500                       | 0.093  | 0.052  | 0.071  | 0.085  | 0.092  | 0.036  | 0.020  | 0.003  | -0.006 | -0.021 | -0.006 | -0.038 | -0.027 | -0.024 | -0.037 |        | 0.7500                |
| 0.8500                       | 0.105  | 0.055  | 0.068  | 0.081  | 0.055  | 0.039  | 0.018  | 0.001  | -0.011 | -0.006 | -0.029 | -0.029 | -0.029 | -0.035 | -0.040 | -0.036 | 0.8500                |
| 0.9500                       | 0.101  | 0.089  | 0.155  | 0.010  | -0.037 | 0.017  | 0.012  | -0.004 | 0.016  | -0.024 | -0.047 | -0.022 | -0.022 | -0.036 | -0.026 | -0.031 | 0.9500                |
| M = 2.231 $\alpha = 04.18$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.076  | 0.382  | -0.023 | -0.023 | -0.039 | -0.028 | 0.032  | -0.002 | 0.021  | 0.091  | -0.035 | -0.060 | -0.068 | -0.065 | -0.035 | -0.029 | 0.0500                |
| 0.1500                       | 0.068  | -0.001 | -0.022 | -0.026 | -0.038 | -0.038 | -0.019 | -0.005 | -0.024 | -0.014 | -0.012 | -0.034 | -0.063 | -0.067 | -0.078 | -0.047 | 0.1500                |
| 0.2500                       | 0.058  | 0.024  | 0.000  | -0.027 | -0.029 | -0.032 | -0.041 | -0.024 | -0.006 | -0.017 | 0.003  | -0.020 | -0.059 | -0.065 | -0.079 | -0.076 | 0.2500                |
| 0.3500                       | 0.056  | -0.004 | -0.018 | -0.026 | -0.030 | -0.033 | -0.025 | -0.012 | -0.016 | -0.014 | -0.007 | -0.037 | -0.064 | -0.068 | -0.081 | -0.050 | 0.3500                |
| 0.4500                       | 0.072  | 0.387  | -0.043 | -0.025 | -0.040 | -0.031 | 0.012  | -0.004 | 0.013  | 0.006  | -0.039 | -0.057 | -0.064 | -0.074 | -0.034 | -0.031 | 0.4500                |
| 0.5500                       | 0.107  | 0.200  | 0.272  | 0.022  | 0.109  | 0.051  | 0.036  | 0.002  | -0.020 | -0.005 | -0.017 | 0.012  | 0.007  | 0.007  | -0.025 | -0.018 | 0.5500                |
| 0.6500                       | 0.137  | 0.097  | 0.126  | 0.141  | 0.123  | 0.094  | 0.037  | 0.018  | -0.002 | -0.021 | 0.005  | -0.017 | 0.009  | 0.013  | -0.001 | -0.022 | 0.6500                |
| 0.7500                       | 0.159  | 0.106  | 0.116  | 0.160  | 0.146  | 0.094  | 0.037  | 0.018  | -0.002 | -0.018 | -0.009 | -0.013 | -0.001 | 0.006  | 0.002  | -0.007 | 0.7500                |
| 0.8500                       | 0.151  | 0.098  | 0.130  | 0.146  | 0.110  | 0.061  | 0.038  | 0.002  | -0.018 | -0.009 | -0.013 | -0.001 | 0.006  | 0.002  | -0.007 | -0.020 | 0.8500                |
| 0.9500                       | 0.114  | 0.118  | 0.267  | 0.047  | -0.022 | 0.031  | 0.015  | -0.003 | 0.022  | 0.009  | -0.026 | 0.014  | 0.010  | -0.004 | -0.024 | -0.016 | 0.9500                |
| M = 2.236 $\alpha = 08.26$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.040  | 0.536  | -0.123 | -0.058 | -0.068 | 0.029  | -0.011 | -0.022 | -0.015 | 0.024  | -0.106 | -0.091 | -0.100 | -0.084 | -0.057 | -0.051 | 0.0500                |
| 0.1500                       | 0.034  | -0.045 | -0.050 | -0.048 | -0.049 | -0.058 | -0.010 | -0.035 | -0.038 | -0.031 | -0.056 | -0.075 | -0.103 | -0.100 | -0.099 | -0.058 | 0.1500                |
| 0.2500                       | 0.025  | 0.002  | -0.019 | -0.052 | -0.055 | -0.056 | -0.062 | -0.012 | -0.014 | -0.026 | -0.025 | -0.061 | -0.089 | -0.100 | -0.104 | -0.102 | 0.2500                |
| 0.3500                       | 0.021  | -0.061 | -0.061 | -0.054 | -0.054 | -0.055 | -0.006 | -0.034 | -0.027 | -0.031 | -0.050 | -0.082 | -0.104 | -0.099 | -0.103 | -0.061 | 0.3500                |
| 0.4500                       | 0.037  | 0.521  | -0.121 | -0.053 | 0.069  | 0.023  | -0.013 | -0.025 | -0.018 | -0.059 | -0.101 | -0.089 | -0.095 | -0.094 | -0.057 | -0.054 | 0.4500                |
| 0.5500                       | 0.109  | 0.222  | 0.356  | 0.083  | -0.038 | 0.059  | 0.008  | -0.033 | 0.018  | 0.040  | 0.061  | 0.052  | 0.048  | 0.052  | -0.018 | -0.022 | 0.5500                |
| 0.6500                       | 0.203  | 0.134  | 0.192  | 0.194  | 0.169  | 0.080  | 0.042  | 0.013  | -0.014 | -0.030 | 0.042  | 0.054  | 0.053  | 0.052  | 0.035  | 0.001  | 0.6500                |
| 0.7500                       | 0.245  | 0.168  | 0.168  | 0.227  | 0.216  | 0.148  | 0.078  | 0.043  | 0.031  | 0.003  | 0.014  | 0.047  | 0.055  | 0.052  | 0.041  |        | 0.7500                |
| 0.8500                       | 0.214  | 0.133  | 0.194  | 0.202  | 0.173  | 0.077  | 0.051  | 0.018  | -0.013 | -0.030 | 0.036  | 0.047  | 0.052  | 0.045  | 0.035  | 0.005  | 0.8500                |
| 0.9500                       | 0.120  | 0.150  | 0.328  | 0.128  | -0.036 | 0.066  | 0.000  | -0.030 | 0.004  | 0.051  | 0.050  | 0.052  | 0.056  | 0.041  | -0.017 | -0.020 | 0.9500                |
| M = 2.232 $\alpha = 12.24$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.001 | 0.679  | -0.155 | -0.095 | -0.097 | 0.044  | -0.029 | -0.061 | -0.051 | 0.022  | -0.128 | -0.109 | -0.119 | -0.102 | -0.073 | -0.060 | 0.0500                |
| 0.1500                       | 0.005  | -0.116 | -0.056 | -0.063 | -0.066 | -0.078 | -0.039 | -0.067 | -0.055 | -0.052 | -0.104 | -0.109 | -0.132 | -0.120 | -0.094 | -0.071 | 0.1500                |
| 0.2500                       | 0.003  | -0.007 | -0.032 | -0.072 | -0.073 | -0.072 | -0.043 | -0.016 | -0.039 | -0.044 | -0.056 | -0.099 | -0.124 | -0.115 | -0.126 | -0.093 | 0.2500                |
| 0.3500                       | -0.008 | -0.131 | -0.058 | -0.067 | -0.070 | -0.071 | -0.056 | -0.067 | -0.044 | -0.053 | -0.095 | -0.115 | -0.131 | -0.119 | -0.097 | -0.072 | 0.3500                |
| 0.4500                       | -0.005 | 0.652  | -0.155 | -0.092 | -0.098 | 0.038  | -0.040 | -0.050 | -0.052 | -0.103 | -0.123 | -0.104 | -0.113 | -0.110 | -0.077 | -0.062 | 0.4500                |
| 0.5500                       | 0.111  | 0.243  | 0.325  | 0.139  | -0.068 | 0.016  | -0.039 | -0.076 | -0.054 | 0.027  | 0.112  | 0.110  | 0.106  | 0.106  | 0.000  | -0.017 | 0.5500                |
| 0.6500                       | 0.260  | 0.191  | 0.262  | 0.316  | 0.248  | 0.115  | 0.098  | 0.025  | 0.001  | -0.010 | 0.093  | 0.102  | 0.107  | 0.104  | 0.091  | 0.034  | 0.6500                |
| 0.7500                       | 0.325  | 0.245  | 0.230  | 0.319  | 0.302  | 0.214  | 0.140  | 0.094  | 0.065  | 0.043  | 0.042  | 0.103  | 0.113  | 0.110  | 0.098  |        | 0.7500                |
| 0.8500                       | 0.261  | 0.209  | 0.263  | 0.312  | 0.244  | 0.127  | 0.060  | 0.025  | 0.006  | -0.009 | 0.087  | 0.106  | 0.110  | 0.104  | 0.090  | 0.039  | 0.8500                |
| 0.9500                       | 0.113  | 0.185  | 0.265  | 0.202  | -0.077 | 0.018  | -0.027 | -0.070 | -0.060 | 0.026  | 0.107  | 0.109  | 0.113  | 0.097  | -0.001 | -0.014 | 0.9500                |

TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Concluded

[illegible]



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(d) BW

| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990 | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$ |                       |
| M = 0.698 $\alpha = -0.42$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | 0.050  | 0.022  | -0.006 | -0.028 | -0.037 | -0.043 | -0.050 | -0.047 | 0.076  | 0.028  | -0.017 | -0.026 | -0.042 | 0.006  | 0.011  | 0.065 | 0.0500                |
| 0.1500                       | 0.061  | 0.040  | 0.019  | -0.013 | -0.016 | -0.025 | -0.034 | -0.024 | 0.008  | 0.006  | -0.019 | -0.027 | -0.042 | -0.007 | 0.008  | 0.071 | 0.1500                |
| 0.2500                       | 0.115  | 0.057  | 0.035  | -0.002 | -0.002 | -0.007 | -0.015 | -0.006 | 0.002  | -0.007 | -0.019 | -0.032 | -0.041 | -0.011 | 0.008  | 0.071 | 0.2500                |
| 0.3500                       | 0.104  | 0.054  | 0.030  | 0.003  | -0.010 | -0.009 | -0.014 | -0.002 | 0.011  | 0.001  | -0.019 | -0.033 | -0.043 | -0.010 | 0.009  | 0.070 | 0.3500                |
| 0.4500                       | 0.067  | 0.019  | -0.006 | -0.022 | -0.033 | -0.040 | -0.040 | -0.016 | 0.073  | 0.023  | -0.019 | -0.035 | -0.044 | -0.001 | 0.014  | 0.065 | 0.4500                |
| 0.5500                       | 0.035  | 0.013  | -0.023 | -0.039 | -0.044 | -0.052 | -0.059 | -0.042 | -0.105 | -0.172 | -0.180 | -0.162 | -0.113 | -0.009 | 0.006  | 0.059 | 0.5500                |
| 0.6500                       | 0.024  | -0.014 | -0.032 | -0.047 | -0.050 | -0.056 | -0.060 | -0.047 | -0.082 | -0.124 | -0.152 | -0.148 | -0.111 | -0.031 |        | 0.058 | 0.6500                |
| 0.7500                       | 0.015  | -0.017 | -0.031 | -0.047 | -0.052 | -0.051 | -0.057 | -0.054 | -0.078 | -0.110 | -0.139 | -0.138 | -0.104 | -0.034 | -0.003 |       | 0.7500                |
| 0.8500                       | 0.015  | -0.016 | -0.032 | -0.051 | -0.052 | -0.051 | -0.058 | -0.052 | -0.083 | -0.121 | -0.157 | -0.148 | -0.112 | -0.029 | 0.001  | 0.059 | 0.8500                |
| 0.9500                       | 0.024  | -0.011 | -0.028 | -0.050 | -0.054 | -0.056 | -0.059 | -0.045 | -0.105 | -0.167 | -0.181 | -0.170 | -0.124 | -0.009 | 0.008  | 0.061 | 0.9500                |
| M = 0.700 $\alpha = -0.06$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | 0.047  | 0.022  | -0.012 | -0.033 | -0.035 | -0.042 | -0.047 | -0.036 | -0.023 | -0.088 | -0.118 | -0.112 | -0.101 | -0.014 | -0.003 | 0.051 | 0.0500                |
| 0.1500                       | 0.046  | 0.011  | -0.015 | -0.036 | -0.040 | -0.046 | -0.051 | -0.036 | -0.050 | -0.078 | -0.105 | -0.104 | -0.092 | -0.029 | -0.005 | 0.054 | 0.1500                |
| 0.2500                       | 0.047  | 0.010  | -0.019 | -0.036 | -0.043 | -0.046 | -0.051 | -0.042 | -0.058 | -0.081 | -0.103 | -0.103 | -0.090 | -0.036 | -0.006 | 0.053 | 0.2500                |
| 0.3500                       | 0.046  | 0.007  | -0.017 | -0.064 | -0.044 | -0.043 | -0.051 | -0.042 | -0.050 | -0.082 | -0.104 | -0.107 | -0.092 | -0.033 | -0.004 | 0.053 | 0.3500                |
| 0.4500                       | 0.049  | 0.010  | -0.015 | -0.064 | -0.040 | -0.044 | -0.049 | -0.033 | -0.029 | -0.093 | -0.117 | -0.117 | -0.098 | -0.017 | 0.002  | 0.051 | 0.4500                |
| 0.5500                       | 0.054  | 0.031  | -0.012 | -0.032 | -0.037 | -0.042 | -0.040 | -0.028 | -0.033 | -0.071 | -0.099 | -0.082 | -0.071 | -0.015 | -0.003 | 0.050 | 0.5500                |
| 0.6500                       | 0.057  | 0.017  | -0.010 | -0.032 | -0.037 | -0.040 | -0.043 | -0.030 | -0.038 | -0.062 | -0.087 | -0.095 | -0.081 | -0.032 | -0.008 | 0.050 | 0.6500                |
| 0.7500                       | 0.059  | 0.015  | -0.006 | -0.031 | -0.038 | -0.039 | -0.044 | -0.034 | -0.049 | -0.064 | -0.084 | -0.092 | -0.079 | -0.036 | -0.011 |       | 0.7500                |
| 0.8500                       | 0.059  | 0.014  | -0.008 | -0.030 | -0.040 | -0.042 | -0.046 | -0.035 | -0.041 | -0.062 | -0.092 | -0.096 | -0.083 | -0.030 | -0.008 | 0.050 | 0.8500                |
| 0.9500                       | 0.052  | 0.010  | -0.007 | -0.033 | -0.040 | -0.042 | -0.047 | -0.030 | -0.047 | -0.068 | -0.102 | -0.109 | -0.092 | -0.016 | -0.002 | 0.052 | 0.9500                |
| M = 0.699 $\alpha = 03.83$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | 0.017  | -0.012 | -0.030 | -0.047 | -0.059 | -0.061 | -0.065 | -0.054 | -0.119 | -0.186 | -0.197 | -0.169 | -0.133 | -0.011 | 0.002  | 0.062 | 0.0500                |
| 0.1500                       | 0.010  | -0.021 | -0.040 | -0.056 | -0.059 | -0.063 | -0.068 | -0.061 | -0.096 | -0.137 | -0.167 | -0.156 | -0.124 | -0.035 | -0.003 | 0.056 | 0.1500                |
| 0.2500                       | 0.005  | -0.023 | -0.043 | -0.055 | -0.057 | -0.058 | -0.065 | -0.063 | -0.088 | -0.125 | -0.156 | -0.149 | -0.118 | -0.038 | -0.003 | 0.057 | 0.2500                |
| 0.3500                       | 0.005  | -0.025 | -0.044 | -0.055 | -0.061 | -0.061 | -0.065 | -0.065 | -0.093 | -0.141 | -0.167 | -0.160 | -0.124 | -0.036 | -0.001 | 0.054 | 0.3500                |
| 0.4500                       | 0.014  | -0.019 | -0.041 | -0.059 | -0.063 | -0.064 | -0.070 | -0.056 | -0.131 | -0.186 | -0.192 | -0.174 | -0.133 | -0.015 | 0.005  | 0.057 | 0.4500                |
| 0.5500                       | 0.054  | 0.019  | -0.015 | -0.050 | -0.043 | -0.052 | -0.064 | -0.037 | 0.084  | 0.033  | -0.007 | -0.030 | -0.030 | -0.005 | 0.004  | 0.059 | 0.5500                |
| 0.6500                       | 0.096  | 0.039  | 0.016  | -0.020 | -0.015 | -0.027 | -0.052 | -0.011 | 0.013  | 0.010  | -0.008 | -0.030 | -0.036 | -0.016 | 0.003  | 0.062 | 0.6500                |
| 0.7500                       | 0.116  | 0.058  | 0.035  | 0.009  | -0.009 | -0.011 | -0.020 | -0.002 | 0.007  | 0.001  | -0.011 | -0.030 | -0.035 | -0.017 | 0.000  |       | 0.7500                |
| 0.8500                       | 0.100  | 0.050  | 0.026  | -0.004 | -0.010 | -0.021 | -0.011 | -0.009 | 0.008  | 0.007  | -0.017 | -0.030 | -0.040 | -0.014 | 0.002  | 0.062 | 0.8500                |
| 0.9500                       | 0.053  | 0.014  | -0.006 | -0.039 | -0.036 | -0.052 | -0.038 | -0.033 | 0.076  | 0.033  | -0.011 | -0.037 | -0.043 | -0.003 | 0.005  | 0.060 | 0.9500                |
| M = 0.700 $\alpha = 07.76$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | -0.046 | -0.073 | -0.092 | -0.107 | -0.115 | -0.121 | -0.127 | -0.108 | -0.274 | -0.328 | -0.318 | -0.252 | -0.181 | -0.028 | -0.011 | 0.040 | 0.0500                |
| 0.1500                       | -0.041 | -0.064 | -0.084 | -0.102 | -0.099 | -0.109 | -0.106 | -0.084 | -0.242 | -0.296 | -0.286 | -0.216 | -0.162 | -0.054 | -0.024 | 0.039 | 0.1500                |
| 0.2500                       | -0.046 | -0.062 | -0.070 | -0.078 | -0.075 | -0.078 | -0.084 | -0.099 | -0.143 | -0.207 | -0.235 | -0.216 | -0.162 | -0.054 | -0.019 | 0.053 | 0.2500                |
| 0.3500                       | -0.044 | -0.068 | -0.086 | -0.092 | -0.094 | -0.086 | -0.099 | -0.101 | -0.168 | -0.242 | -0.276 | -0.248 | -0.187 | -0.061 | -0.021 | 0.039 | 0.3500                |
| 0.4500                       | -0.047 | -0.079 | -0.099 | -0.115 | -0.118 | -0.119 | -0.102 | -0.117 | -0.292 | -0.334 | -0.307 | -0.253 | -0.180 | -0.030 | -0.006 | 0.040 | 0.4500                |
| 0.5500                       | 0.014  | -0.010 | -0.058 | -0.089 | -0.085 | -0.092 | -0.094 | -0.078 | 0.145  | 0.129  | 0.062  | 0.028  | -0.001 | -0.005 | -0.005 | 0.051 | 0.5500                |
| 0.6500                       | 0.125  | 0.061  | 0.025  | -0.010 | -0.018 | -0.033 | -0.033 | -0.002 | 0.049  | 0.073  | 0.062  | 0.029  | 0.002  | -0.008 | -0.002 | 0.058 | 0.6500                |
| 0.7500                       | 0.175  | 0.111  | 0.083  | 0.049  | 0.031  | 0.020  | 0.019  | 0.030  | 0.061  | 0.069  | 0.060  | 0.028  | 0.002  | -0.007 | -0.004 |       | 0.7500                |
| 0.8500                       | 0.130  | 0.074  | 0.040  | 0.006  | -0.005 | -0.008 | -0.013 | 0.008  | 0.042  | 0.069  | 0.052  | 0.027  | -0.002 | -0.009 | -0.002 | 0.058 | 0.8500                |
| 0.9500                       | 0.053  | -0.026 | -0.034 | -0.076 | -0.084 | -0.091 | -0.090 | -0.072 | 0.133  | 0.128  | 0.057  | 0.014  | -0.009 | -0.009 | -0.002 | 0.054 | 0.9500                |
| M = 0.696 $\alpha = 11.79$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |                       |
| 0.0500                       | -0.128 | -0.147 | -0.173 | -0.190 | -0.181 | -0.178 | -0.191 | -0.190 | -0.459 | -0.489 | -0.421 | -0.325 | -0.215 | -0.035 | -0.005 | 0.051 | 0.0500                |
| 0.1500                       | -0.104 | -0.104 | -0.128 | -0.128 | -0.162 | -0.130 | -0.133 | -0.134 | -0.242 | -0.351 | -0.394 | -0.347 | -0.265 | -0.060 | -0.015 | 0.054 | 0.1500                |
| 0.2500                       | -0.063 | -0.071 | -0.075 | -0.097 | -0.098 | -0.098 | -0.088 | -0.103 | -0.181 | -0.272 | -0.317 | -0.268 | -0.190 | -0.060 | -0.018 | 0.057 | 0.2500                |
| 0.3500                       | -0.082 | -0.096 | -0.109 | -0.108 | -0.102 | -0.106 | -0.121 | -0.127 | -0.239 | -0.355 | -0.389 | -0.347 | -0.264 | -0.060 | -0.010 | 0.051 | 0.3500                |
| 0.4500                       | -0.116 | -0.148 | -0.171 | -0.182 | -0.181 | -0.186 | -0.193 | -0.186 | -0.483 | -0.493 | -0.416 | -0.323 | -0.212 | -0.038 | -0.002 | 0.049 | 0.4500                |
| 0.5500                       | -0.031 | -0.079 | -0.129 | -0.158 | -0.159 | -0.154 | -0.152 | -0.135 | 0.218  | 0.233  | 0.148  | 0.102  | 0.053  | 0.008  | 0.014  | 0.067 | 0.5500                |
| 0.6500                       | 0.157  | 0.041  | 0.062  | 0.028  | -0.014 | -0.040 | -0.002 | 0.027  | 0.102  | 0.153  | 0.151  | 0.106  | 0.059  | 0.017  | 0.019  | 0.073 | 0.6500                |
| 0.7500                       | 0.234  | 0.152  | 0.142  | 0.090  | 0.088  | 0.038  | 0.082  | 0.097  | 0.146  | 0.162  | 0.151  | 0.104  | 0.059  | 0.022  | 0.017  |       | 0.7500                |
| 0.8500                       | 0.219  | 0.129  | 0.077  | 0.047  | 0.020  | 0.011  | -0.001 | 0.033  | 0.093  | 0.147  | 0.139  | 0.103  | 0.054  | 0.018  | 0.017  | 0.074 | 0.8500                |
| 0.9500                       | -0.022 | -0.072 | -0.092 | -0.071 | -0.112 | -0.128 | -0.137 | -0.119 | 0.204  | 0.234  | 0.143  | 0.086  | 0.045  | 0.012  | 0.017  | 0.069 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(d) BW - Continued

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| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 0.699 $\alpha = 15.67$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.237 | -0.254 | -0.283 | -0.294 | -0.295 | -0.291 | -0.306 | -0.297 | -0.697 | -0.711 | -0.610 | -0.461 | -0.299 | -0.023 | 0.013  | 0.062  | 0.0500                |
| 0.1500                       | -0.196 | -0.209 | -0.207 | -0.173 | -0.172 | -0.196 | -0.173 | -0.187 | -0.486 | -0.551 | -0.537 | -0.352 | -0.084 | -0.038 | 0.037  | 0.1500 |                       |
| 0.2500                       | -0.088 | -0.099 | -0.144 | -0.097 | -0.100 | -0.107 | -0.089 | -0.138 | -0.257 | -0.386 | -0.412 | -0.342 | -0.240 | -0.094 | -0.046 | 0.036  | 0.2500                |
| 0.3500                       | -0.199 | -0.117 | -0.114 | -0.146 | -0.143 | -0.139 | -0.151 | -0.187 | -0.362 | -0.493 | -0.546 | -0.533 | -0.363 | -0.081 | -0.034 | 0.036  | 0.3500                |
| 0.4500                       | -0.236 | -0.264 | -0.263 | -0.289 | -0.287 | -0.290 | -0.284 | -0.286 | -0.706 | -0.716 | -0.609 | -0.459 | -0.290 | -0.029 | 0.018  | 0.061  | 0.4500                |
| 0.5500                       | -0.141 | -0.153 | -0.222 | -0.229 | -0.239 | -0.251 | -0.270 | 0.229  | 0.262  | 0.311  | 0.224  | 0.156  | 0.098  | 0.024  | 0.023  | 0.078  | 0.5500                |
| 0.6500                       | 0.174  | 0.101  | 0.066  | 0.033  | 0.009  | 0.006  | 0.007  | 0.033  | 0.132  | 0.209  | 0.216  | 0.165  | 0.100  | 0.030  | 0.025  | 0.081  | 0.6500                |
| 0.7500                       | 0.335  | 0.250  | 0.183  | 0.162  | 0.128  | 0.127  | 0.139  | 0.166  | 0.211  | 0.237  | 0.224  | 0.166  | 0.102  | 0.039  | 0.025  | 0.081  | 0.7500                |
| 0.8500                       | 0.192  | 0.109  | 0.076  | 0.047  | 0.016  | 0.017  | 0.004  | 0.032  | 0.118  | 0.201  | 0.206  | 0.160  | 0.096  | 0.031  | 0.022  | 0.081  | 0.8500                |
| 0.9500                       | -0.104 | -0.166 | -0.186 | -0.229 | -0.231 | -0.232 | -0.243 | -0.223 | 0.242  | 0.312  | 0.223  | 0.145  | 0.084  | 0.023  | 0.023  | 0.081  | 0.9500                |
| M = 0.903 $\alpha = 03.78$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.034  | -0.001 | -0.029 | -0.053 | -0.061 | -0.067 | -0.077 | -0.049 | -0.082 | -0.172 | -0.219 | -0.232 | -0.201 | 0.003  | 0.019  | 0.080  | 0.0500                |
| 0.1500                       | 0.035  | -0.007 | -0.036 | -0.059 | -0.063 | -0.067 | -0.069 | -0.049 | -0.072 | -0.132 | -0.193 | -0.216 | -0.187 | -0.018 | 0.016  | 0.082  | 0.1500                |
| 0.2500                       | 0.026  | -0.011 | -0.040 | -0.057 | -0.061 | -0.064 | -0.066 | -0.050 | -0.067 | -0.121 | -0.177 | -0.210 | -0.178 | -0.023 | 0.016  | 0.085  | 0.2500                |
| 0.3500                       | 0.025  | -0.014 | -0.040 | -0.060 | -0.065 | -0.062 | -0.067 | -0.051 | -0.070 | -0.136 | -0.187 | -0.217 | -0.183 | -0.019 | 0.018  | 0.082  | 0.3500                |
| 0.4500                       | 0.038  | -0.006 | -0.037 | -0.060 | -0.067 | -0.058 | -0.074 | -0.050 | -0.092 | -0.178 | -0.208 | -0.230 | -0.192 | 0.001  | 0.025  | 0.080  | 0.4500                |
| 0.5500                       | 0.071  | 0.042  | -0.016 | -0.040 | -0.051 | -0.056 | -0.064 | -0.042 | 0.102  | 0.030  | -0.021 | -0.047 | -0.044 | 0.010  | 0.019  | 0.083  | 0.5500                |
| 0.6500                       | 0.113  | 0.056  | 0.020  | -0.006 | -0.029 | -0.027 | -0.043 | -0.020 | 0.029  | 0.016  | -0.019 | -0.044 | -0.047 | -0.006 | 0.015  | 0.088  | 0.6500                |
| 0.7500                       | 0.135  | 0.066  | 0.040  | 0.005  | -0.011 | -0.019 | -0.028 | -0.005 | 0.020  | 0.008  | -0.019 | -0.044 | -0.047 | -0.009 | 0.010  | 0.088  | 0.7500                |
| 0.8500                       | 0.125  | 0.057  | 0.031  | -0.009 | -0.019 | -0.030 | -0.037 | -0.012 | 0.024  | 0.015  | -0.026 | -0.045 | -0.052 | -0.002 | 0.015  | 0.088  | 0.8500                |
| 0.9500                       | 0.083  | 0.021  | -0.003 | -0.047 | -0.045 | -0.057 | -0.060 | -0.038 | 0.097  | 0.034  | -0.023 | -0.055 | -0.058 | 0.013  | 0.020  | 0.083  | 0.9500                |
| M = 0.957 $\alpha = 03.88$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.039  | 0.014  | -0.029 | -0.067 | -0.075 | -0.080 | -0.091 | -0.049 | -0.056 | -0.168 | -0.224 | -0.252 | -0.297 | -0.010 | 0.045  | 0.101  | 0.0500                |
| 0.1500                       | 0.033  | -0.008 | -0.043 | -0.072 | -0.075 | -0.080 | -0.088 | -0.046 | -0.051 | -0.122 | -0.196 | -0.239 | -0.273 | -0.026 | 0.048  | 0.102  | 0.1500                |
| 0.2500                       | 0.028  | -0.016 | -0.049 | -0.069 | -0.074 | -0.076 | -0.082 | -0.044 | -0.046 | -0.112 | -0.186 | -0.236 | -0.265 | -0.029 | 0.050  | 0.106  | 0.2500                |
| 0.3500                       | 0.026  | -0.016 | -0.048 | -0.074 | -0.080 | -0.077 | -0.085 | -0.045 | -0.048 | -0.124 | -0.194 | -0.242 | -0.267 | -0.027 | 0.049  | 0.102  | 0.3500                |
| 0.4500                       | 0.039  | -0.010 | -0.044 | -0.071 | -0.078 | -0.082 | -0.088 | -0.048 | -0.068 | -0.164 | -0.214 | -0.254 | -0.272 | -0.012 | 0.050  | 0.099  | 0.4500                |
| 0.5500                       | 0.072  | 0.033  | -0.026 | -0.052 | -0.061 | -0.066 | -0.082 | -0.044 | 0.115  | 0.036  | -0.031 | -0.071 | -0.081 | 0.000  | 0.040  | 0.104  | 0.5500                |
| 0.6500                       | 0.109  | 0.051  | 0.014  | -0.020 | -0.037 | -0.040 | -0.057 | -0.033 | 0.042  | 0.019  | -0.027 | -0.069 | -0.086 | -0.010 | 0.031  | 0.107  | 0.6500                |
| 0.7500                       | 0.136  | 0.070  | 0.034  | -0.006 | -0.024 | -0.029 | -0.046 | -0.018 | 0.034  | 0.008  | -0.027 | -0.068 | -0.086 | -0.012 | 0.025  | 0.108  | 0.7500                |
| 0.8500                       | 0.121  | 0.058  | 0.020  | -0.019 | -0.030 | -0.044 | -0.056 | -0.020 | 0.036  | 0.019  | -0.032 | -0.071 | -0.091 | -0.006 | 0.030  | 0.108  | 0.8500                |
| 0.9500                       | 0.082  | 0.024  | -0.009 | -0.056 | -0.055 | -0.069 | -0.079 | -0.042 | 0.109  | 0.037  | -0.032 | -0.079 | -0.099 | 0.006  | 0.039  | 0.105  | 0.9500                |
| M = 1.008 $\alpha = -00.05$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.126  | 0.099  | 0.042  | 0.000  | -0.022 | -0.033 | -0.039 | -0.055 | 0.035  | -0.045 | -0.091 | -0.113 | -0.186 | -0.179 | -0.102 | 0.045  | 0.0500                |
| 0.1500                       | 0.133  | 0.077  | 0.033  | -0.007 | -0.033 | -0.038 | -0.039 | -0.055 | 0.000  | -0.027 | -0.077 | -0.104 | -0.171 | -0.111 | -0.112 | 0.054  | 0.1500                |
| 0.2500                       | 0.133  | 0.073  | 0.029  | -0.009 | -0.034 | -0.040 | -0.060 | -0.057 | -0.008 | -0.030 | -0.072 | -0.107 | -0.167 | -0.218 | -0.114 | 0.060  | 0.2500                |
| 0.3500                       | 0.133  | 0.073  | 0.028  | -0.010 | -0.036 | -0.038 | -0.059 | -0.058 | 0.004  | -0.031 | -0.074 | -0.106 | -0.166 | -0.219 | -0.100 | 0.055  | 0.3500                |
| 0.4500                       | 0.135  | 0.074  | 0.030  | -0.008 | -0.037 | -0.039 | -0.058 | -0.059 | 0.031  | -0.043 | -0.085 | -0.112 | -0.168 | -0.201 | -0.089 | 0.045  | 0.4500                |
| 0.5500                       | 0.138  | 0.097  | 0.032  | -0.003 | -0.034 | -0.038 | -0.058 | -0.057 | 0.053  | -0.023 | -0.075 | -0.097 | -0.139 | -0.181 | -0.100 | 0.046  | 0.5500                |
| 0.6500                       | 0.141  | 0.082  | 0.037  | -0.003 | -0.030 | -0.037 | -0.054 | -0.058 | 0.010  | -0.009 | -0.062 | -0.086 | -0.135 | -0.183 | -0.117 | 0.054  | 0.6500                |
| 0.7500                       | 0.142  | 0.077  | 0.038  | -0.003 | -0.028 | -0.035 | -0.052 | -0.058 | -0.025 | -0.006 | -0.058 | -0.082 | -0.130 | -0.183 | -0.126 | 0.054  | 0.7500                |
| 0.8500                       | 0.143  | 0.076  | 0.039  | -0.005 | -0.032 | -0.035 | -0.053 | -0.056 | 0.004  | -0.009 | -0.067 | -0.086 | -0.138 | -0.186 | -0.117 | 0.055  | 0.8500                |
| 0.9500                       | 0.138  | 0.074  | 0.038  | -0.007 | -0.031 | -0.037 | -0.056 | -0.058 | 0.047  | -0.022 | -0.078 | -0.098 | -0.156 | -0.170 | -0.103 | 0.045  | 0.9500                |
| M = 1.002 $\alpha = 03.88$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.083  | 0.048  | -0.007 | -0.046 | -0.048 | -0.075 | -0.088 | -0.083 | -0.034 | -0.117 | -0.162 | -0.212 | -0.290 | -0.205 | -0.085 | 0.050  | 0.0500                |
| 0.1500                       | 0.075  | 0.028  | -0.015 | -0.048 | -0.067 | -0.071 | -0.086 | -0.079 | -0.026 | -0.076 | -0.138 | -0.197 | -0.269 | -0.275 | -0.078 | 0.059  | 0.1500                |
| 0.2500                       | 0.071  | 0.024  | -0.017 | -0.046 | -0.067 | -0.071 | -0.086 | -0.077 | -0.022 | -0.077 | -0.124 | -0.195 | -0.260 | -0.289 | -0.076 | 0.069  | 0.2500                |
| 0.3500                       | 0.070  | 0.022  | -0.016 | -0.049 | -0.075 | -0.066 | -0.083 | -0.082 | -0.025 | -0.079 | -0.134 | -0.202 | -0.263 | -0.282 | -0.072 | 0.060  | 0.3500                |
| 0.4500                       | 0.084  | 0.025  | -0.016 | -0.049 | -0.075 | -0.069 | -0.089 | -0.086 | -0.040 | -0.111 | -0.155 | -0.213 | -0.268 | -0.230 | -0.077 | 0.049  | 0.4500                |
| 0.5500                       | 0.119  | 0.081  | 0.011  | -0.030 | -0.057 | -0.061 | -0.083 | -0.079 | 0.131  | 0.075  | 0.015  | -0.051 | -0.090 | -0.146 | -0.090 | 0.049  | 0.5500                |
| 0.6500                       | 0.156  | 0.086  | 0.042  | -0.001 | -0.029 | -0.038 | -0.056 | -0.059 | 0.060  | 0.057  | 0.017  | -0.047 | -0.090 | -0.120 | -0.108 | 0.048  | 0.6500                |
| 0.7500                       | 0.178  | 0.101  | 0.062  | 0.018  | -0.012 | -0.021 | -0.040 | -0.048 | 0.023  | 0.050  | 0.017  | -0.046 | -0.087 | -0.112 | -0.118 | 0.048  | 0.7500                |
| 0.8500                       | 0.168  | 0.090  | 0.049  | 0.002  | -0.028 | -0.030 | -0.052 | -0.047 | 0.051  | 0.058  | 0.012  | -0.048 | -0.093 | -0.116 | -0.111 | 0.048  | 0.8500                |
| 0.9500                       | 0.122  | 0.056  | 0.019  | -0.039 | -0.050 | -0.060 | -0.074 | -0.077 | 0.127  | 0.073  | 0.012  | -0.057 | -0.107 | -0.126 | -0.092 | 0.045  | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(d) BW - Continued

| Fraction of body length, x/l |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |        |
|------------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|
| $\frac{\theta}{2\pi}$        | 0.050 | 0.100 | 0.135 | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |        |
| $C_p$                        | $C_p$ | $C_p$ | $C_p$ | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |        |
| M = 1.062 $\alpha = 03.93$   |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |        |
| 0.0500                       | 0.095 | 0.047 | 0.017 | -0.007 | -0.017 | -0.003 | 0.002  | 0.016  | 0.043  | -0.077 | -0.144 | -0.167 | -0.200 | -0.134 | -0.076 | 0.037  | 0.0500                |        |
| 0.1500                       | 0.079 | 0.031 | 0.005 | -0.010 | -0.019 | 0.004  | 0.006  | 0.014  | 0.040  | -0.041 | -0.122 | -0.150 | -0.181 | -0.185 | -0.088 | 0.046  | 0.1500                |        |
| 0.2500                       | 0.074 | 0.023 | 0.003 | -0.007 | -0.016 | 0.013  | 0.009  | 0.012  | 0.037  | -0.033 | -0.104 | -0.147 | -0.175 | -0.196 | -0.096 | 0.053  | 0.2500                |        |
| 0.3500                       | 0.075 | 0.024 | 0.006 | -0.011 | -0.023 | 0.009  | 0.009  | 0.008  | 0.040  | -0.044 | -0.116 | -0.151 | -0.177 | -0.191 | -0.084 | 0.046  | 0.3500                |        |
| 0.4500                       | 0.084 | 0.033 | 0.010 | -0.011 | -0.023 | 0.001  | 0.009  | 0.006  | 0.035  | -0.075 | -0.135 | -0.161 | -0.181 | -0.149 | -0.070 | 0.037  | 0.4500                |        |
| 0.5500                       | 0.121 | 0.084 | 0.035 | 0.004  | -0.013 | 0.006  | 0.013  | 0.020  | 0.196  | 0.111  | 0.034  | -0.023 | -0.023 | -0.062 | -0.065 | 0.037  | 0.5500                |        |
| 0.6500                       | 0.148 | 0.095 | 0.063 | 0.042  | 0.011  | 0.020  | 0.031  | 0.020  | 0.196  | 0.111  | 0.034  | -0.023 | -0.023 | -0.062 | -0.065 | 0.037  | 0.5500                |        |
| 0.7500                       | 0.168 | 0.105 | 0.085 | 0.043  | 0.017  | 0.031  | 0.036  | 0.058  | 0.120  | 0.094  | 0.034  | -0.018 | -0.023 | -0.041 | -0.066 | 0.033  | 0.6500                |        |
| 0.8500                       | 0.175 | 0.095 | 0.070 | 0.035  | 0.016  | 0.022  | 0.023  | 0.057  | 0.125  | 0.100  | 0.030  | -0.021 | -0.021 | -0.033 | -0.067 | 0.037  | 0.7500                |        |
| 0.9500                       | 0.125 | 0.060 | 0.038 | -0.002 | -0.004 | 0.004  | 0.010  | 0.029  | 0.196  | 0.115  | 0.031  | -0.030 | -0.042 | -0.048 | -0.063 | 0.039  | 0.8500                |        |
|                              |       |       |       |        |        |        | 0.010  | 0.029  | 0.196  | 0.115  | 0.031  | -0.030 | -0.042 | -0.048 | -0.063 | 0.039  | 0.9500                |        |
| M = 1.109 $\alpha = 03.93$   |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |        |
| 0.0500                       | 0.112 | 0.047 | 0.038 | 0.017  | 0.014  | 0.008  | -0.022 | -0.032 | 0.008  | -0.026 | -0.055 | -0.132 | -0.181 | -0.138 | -0.030 | 0.124  | 0.0500                |        |
| 0.1500                       | 0.102 | 0.039 | 0.024 | 0.013  | 0.014  | 0.008  | -0.025 | -0.032 | 0.021  | 0.013  | -0.033 | -0.118 | -0.160 | -0.168 | -0.045 | 0.126  | 0.1500                |        |
| 0.2500                       | 0.098 | 0.035 | 0.021 | 0.018  | 0.020  | 0.007  | -0.028 | -0.028 | 0.024  | 0.019  | -0.024 | -0.118 | -0.155 | -0.172 | -0.059 | 0.135  | 0.2500                |        |
| 0.3500                       | 0.100 | 0.033 | 0.019 | 0.017  | 0.014  | 0.005  | -0.026 | -0.029 | 0.033  | 0.008  | -0.041 | -0.119 | -0.155 | -0.177 | -0.041 | 0.127  | 0.3500                |        |
| 0.4500                       | 0.114 | 0.038 | 0.024 | 0.012  | 0.008  | 0.002  | -0.026 | -0.060 | 0.020  | -0.023 | -0.069 | -0.129 | -0.156 | -0.148 | -0.025 | 0.121  | 0.4500                |        |
| 0.5500                       | 0.150 | 0.083 | 0.048 | 0.030  | 0.017  | 0.005  | -0.020 | -0.016 | 0.162  | 0.119  | 0.129  | 0.031  | 0.012  | -0.066 | -0.027 | 0.124  | 0.5500                |        |
| 0.6500                       | 0.183 | 0.102 | 0.078 | 0.056  | 0.035  | 0.022  | 0.004  | 0.010  | 0.037  | 0.108  | 0.136  | 0.038  | 0.009  | -0.046 | -0.030 | 0.129  | 0.6500                |        |
| 0.7500                       | 0.207 | 0.114 | 0.101 | 0.066  | 0.048  | 0.034  | 0.026  | 0.016  | 0.007  | 0.112  | 0.140  | 0.043  | 0.011  | -0.046 | -0.028 | 0.125  | 0.7500                |        |
| 0.8500                       | 0.188 | 0.115 | 0.089 | 0.055  | 0.037  | 0.060  | 0.018  | 0.014  | 0.016  | 0.110  | 0.132  | 0.041  | 0.006  | -0.055 | -0.021 | 0.126  | 0.8500                |        |
| 0.9500                       | 0.146 | 0.076 | 0.056 | 0.022  | 0.019  | 0.015  | -0.007 | -0.022 | 0.138  | 0.117  | 0.126  | 0.030  | -0.009 | -0.065 | -0.020 | 0.125  | 0.9500                |        |
|                              |       |       |       |        |        |        | -0.007 | -0.022 | 0.138  | 0.117  | 0.126  | 0.030  | -0.009 | -0.065 | -0.020 | 0.125  | 0.9500                |        |
| M = 1.299 $\alpha = -04.18$  |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |        |
| 0.0500                       | 0.120 | 0.073 | 0.052 | 0.027  | 0.010  | -0.001 | -0.016 | -0.002 | 0.123  | 0.069  | 0.042  | 0.016  | -0.018 | -0.040 | -0.050 | -0.019 | 0.0500                |        |
| 0.1500                       | 0.155 | 0.104 | 0.074 | 0.051  | 0.034  | 0.023  | 0.004  | 0.005  | -0.009 | 0.048  | 0.043  | 0.025  | -0.009 | -0.030 | -0.050 | -0.034 | 0.1500                |        |
| 0.2500                       | 0.177 | 0.117 | 0.086 | 0.059  | 0.046  | 0.032  | 0.015  | 0.012  | 0.002  | 0.026  | 0.045  | 0.021  | -0.006 | -0.029 | -0.051 | -0.041 | 0.2500                |        |
| 0.3500                       | 0.163 | 0.102 | 0.075 | 0.050  | 0.038  | 0.022  | 0.005  | 0.003  | 0.005  | 0.047  | 0.041  | 0.027  | -0.005 | -0.039 | -0.051 | -0.033 | 0.3500                |        |
| 0.4500                       | 0.132 | 0.073 | 0.046 | 0.023  | 0.014  | 0.007  | -0.013 | -0.013 | 0.124  | 0.073  | 0.036  | 0.025  | -0.003 | -0.060 | -0.051 | -0.022 | 0.4500                |        |
| 0.5500                       | 0.100 | 0.075 | 0.027 | 0.023  | -0.003 | -0.018 | -0.020 | -0.018 | 0.009  | -0.081 | -0.088 | -0.108 | -0.130 | -0.119 | -0.063 | -0.017 | 0.5500                |        |
| 0.6500                       | 0.086 | 0.032 | 0.020 | 0.009  | -0.006 | -0.012 | -0.014 | -0.028 | -0.012 | -0.026 | -0.067 | -0.101 | -0.118 | -0.130 | -0.092 | -0.002 | 0.6500                |        |
| 0.7500                       | 0.086 | 0.034 | 0.020 | 0.006  | -0.012 | -0.008 | -0.010 | -0.019 | -0.021 | -0.013 | -0.054 | -0.093 | -0.115 | -0.130 | -0.114 | 0.002  | 0.7500                |        |
| 0.8500                       | 0.090 | 0.037 | 0.019 | 0.007  | -0.015 | -0.012 | -0.011 | -0.014 | -0.015 | -0.030 | -0.064 | -0.102 | -0.123 | -0.135 | -0.087 | 0.002  | 0.8500                |        |
| 0.9500                       | 0.096 | 0.043 | 0.026 | 0.014  | -0.006 | -0.012 | -0.019 | -0.018 | -0.003 | -0.071 | -0.087 | -0.126 | -0.138 | -0.126 | -0.062 | -0.007 | 0.9500                |        |
|                              |       |       |       |        |        |        | -0.012 | -0.019 | -0.018 | -0.003 | -0.071 | -0.087 | -0.126 | -0.138 | -0.126 | -0.062 | -0.007                | 0.9500 |
| M = 1.304 $\alpha = -00.10$  |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |        |
| 0.0500                       | 0.122 | 0.076 | 0.062 | 0.032  | 0.020  | 0.015  | -0.004 | -0.002 | 0.072  | 0.002  | -0.026 | -0.048 | -0.083 | -0.084 | -0.049 | -0.012 | 0.0500                |        |
| 0.1500                       | 0.127 | 0.070 | 0.058 | 0.030  | 0.019  | 0.013  | -0.003 | -0.003 | -0.001 | 0.007  | -0.019 | -0.034 | -0.072 | -0.084 | -0.069 | -0.017 | 0.1500                |        |
| 0.2500                       | 0.129 | 0.069 | 0.057 | 0.028  | 0.021  | 0.010  | -0.001 | -0.002 | 0.010  | 0.008  | -0.014 | -0.035 | -0.069 | -0.085 | -0.087 | -0.017 | 0.2500                |        |
| 0.3500                       | 0.130 | 0.071 | 0.056 | 0.030  | 0.018  | 0.017  | 0.001  | -0.007 | -0.002 | 0.008  | -0.021 | -0.032 | -0.068 | -0.089 | -0.069 | -0.019 | 0.3500                |        |
| 0.4500                       | 0.130 | 0.073 | 0.055 | 0.029  | 0.020  | 0.015  | -0.007 | -0.004 | 0.087  | 0.008  | -0.034 | -0.037 | -0.067 | -0.105 | -0.047 | -0.019 | 0.4500                |        |
| 0.5500                       | 0.131 | 0.102 | 0.058 | 0.032  | 0.022  | 0.019  | -0.007 | -0.005 | 0.058  | 0.008  | -0.024 | -0.049 | -0.066 | -0.072 | -0.053 | -0.030 | 0.5500                |        |
| 0.6500                       | 0.128 | 0.075 | 0.059 | 0.031  | 0.018  | 0.011  | 0.001  | 0.001  | 0.002  | 0.015  | -0.007 | -0.037 | -0.061 | -0.058 | -0.073 | -0.041 | 0.6500                |        |
| 0.7500                       | 0.126 | 0.079 | 0.061 | 0.034  | 0.018  | 0.011  | -0.001 | -0.006 | 0.008  | 0.006  | 0.001  | -0.040 | -0.058 | -0.059 | -0.085 | 0.000  | 0.7500                |        |
| 0.8500                       | 0.125 | 0.080 | 0.061 | 0.033  | 0.020  | 0.007  | -0.003 | -0.002 | -0.004 | 0.017  | -0.008 | -0.046 | -0.060 | -0.063 | -0.068 | -0.031 | 0.8500                |        |
| 0.9500                       | 0.120 | 0.076 | 0.061 | 0.036  | 0.017  | 0.008  | 0.001  | 0.001  | 0.068  | 0.005  | -0.024 | -0.056 | -0.081 | -0.078 | -0.048 | -0.015 | 0.9500                |        |
|                              |       |       |       |        |        |        | 0.001  | 0.001  | 0.068  | 0.005  | -0.024 | -0.056 | -0.081 | -0.078 | -0.048 | -0.015 | 0.9500                |        |
| M = 1.303 $\alpha = 03.83$   |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |        |
| 0.0500                       | 0.095 | 0.040 | 0.029 | 0.003  | -0.004 | -0.011 | -0.028 | -0.021 | 0.006  | -0.075 | -0.090 | -0.114 | -0.141 | -0.127 | -0.063 | -0.013 | 0.0500                |        |
| 0.1500                       | 0.084 | 0.031 | 0.016 | 0.006  | -0.007 | -0.018 | -0.020 | -0.018 | -0.016 | -0.036 | -0.075 | -0.094 | -0.133 | -0.142 | -0.092 | -0.002 | 0.1500                |        |
| 0.2500                       | 0.081 | 0.032 | 0.014 | 0.005  | -0.004 | -0.014 | -0.014 | -0.020 | -0.024 | -0.020 | -0.066 | -0.094 | -0.126 | -0.139 | -0.124 | 0.000  | 0.2500                |        |
| 0.3500                       | 0.084 | 0.033 | 0.016 | 0.006  | -0.006 | -0.015 | -0.015 | -0.028 | -0.010 | -0.038 | -0.077 | -0.095 | -0.129 | -0.147 | -0.091 | -0.001 | 0.3500                |        |
| 0.4500                       | 0.099 | 0.043 | 0.023 | 0.004  | -0.006 | -0.016 | -0.022 | -0.027 | 0.011  | -0.074 | -0.097 | -0.105 | -0.132 | -0.149 | -0.063 | -0.014 | 0.4500                |        |
| 0.5500                       | 0.131 | 0.095 | 0.053 | 0.025  | 0.011  | 0.004  | -0.020 | -0.017 | 0.128  | 0.065  | 0.042  | 0.016  | -0.005 | -0.020 | -0.035 | -0.025 | 0.5500                |        |
| 0.6500                       | 0.165 | 0.091 | 0.083 | 0.047  | 0.032  | 0.032  | 0.006  | 0.003  | 0.001  | 0.046  | 0.048  | 0.021  | 0.002  | -0.008 | -0.031 | -0.046 | 0.6500                |        |
| 0.7500                       | 0.180 | 0.105 | 0.098 | 0.058  | 0.041  | 0.036  | 0.017  | 0.015  | 0.011  | 0.020  | 0.054  | 0.019  | -0.002 | -0.012 | -0.043 | 0.000  | 0.7500                |        |
| 0.8500                       | 0.164 | 0.091 | 0.085 | 0.046  | 0.029  | 0.022  | 0.010  | 0.006  | 0.061  | 0.048  | 0.013  | -0.003 | -0.013 | -0.043 | -0.039 | 0.000  | 0.8500                |        |
| 0.9500                       | 0.124 | 0.062 | 0.055 | 0.023  | 0.008  | 0.001  | -0.012 | -0.013 | 0.117  | 0.072  | 0.043  | 0.004  | -0.016 | -0.019 | -0.048 | -0.022 | 0.9500                |        |
|                              |       |       |       |        |        |        | -0.012 | -0.013 | 0.117  | 0.072  | 0.043  | 0.004  | -0.016 | -0.019 | -0.048 | -0.022 | 0.9500                |        |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(d) BW - Continued

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| Fraction of body length, x/l     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$            | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
|                                  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| $M = 1.301 \quad \alpha = 07.81$ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                           | 0.050  | -0.004 | -0.013 | -0.035 | -0.045 | -0.058 | -0.065 | -0.066 | -0.067 | -0.159 | -0.146 | -0.176 | -0.198 | -0.156 | -0.079 | -0.029 | 0.0500                |
| 0.1500                           | 0.045  | -0.002 | -0.012 | -0.018 | -0.037 | -0.031 | -0.037 | -0.040 | -0.032 | -0.077 | -0.133 | -0.162 | -0.193 | -0.203 | -0.112 | -0.004 | 0.1500                |
| 0.2500                           | 0.051  | 0.006  | -0.002 | -0.008 | -0.024 | -0.013 | -0.025 | -0.021 | -0.024 | -0.043 | -0.112 | -0.145 | -0.172 | -0.190 | -0.172 | -0.017 | 0.2500                |
| 0.3500                           | 0.046  | -0.004 | -0.013 | -0.021 | -0.041 | -0.027 | -0.036 | -0.039 | -0.024 | -0.079 | -0.131 | -0.160 | -0.190 | -0.210 | -0.110 | -0.002 | 0.3500                |
| 0.4500                           | 0.056  | -0.007 | -0.023 | -0.033 | -0.056 | -0.060 | -0.066 | -0.071 | -0.065 | -0.157 | -0.151 | -0.162 | -0.189 | -0.173 | -0.078 | -0.031 | 0.4500                |
| 0.5500                           | 0.116  | 0.075  | 0.028  | 0.006  | -0.002 | -0.033 | -0.044 | -0.053 | 0.179  | 0.134  | 0.134  | 0.100  | 0.076  | 0.025  | -0.035 | -0.048 | 0.5500                |
| 0.6500                           | 0.204  | 0.126  | 0.108  | 0.071  | 0.056  | 0.041  | 0.017  | 0.014  | 0.009  | 0.106  | 0.123  | 0.098  | 0.072  | 0.058  | -0.057 | 0.6500 |                       |
| 0.7500                           | 0.247  | 0.163  | 0.150  | 0.107  | 0.087  | 0.076  | 0.051  | 0.050  | 0.036  | 0.036  | 0.131  | 0.100  | 0.083  | 0.057  | 0.026  | 0.7500 |                       |
| 0.8500                           | 0.208  | 0.124  | 0.115  | 0.066  | 0.051  | 0.041  | 0.020  | 0.019  | 0.004  | 0.108  | 0.131  | 0.096  | 0.076  | 0.052  | -0.001 | -0.048 | 0.8500                |
| 0.9500                           | 0.114  | 0.043  | 0.039  | -0.001 | -0.016 | -0.026 | -0.042 | -0.048 | 0.164  | 0.146  | 0.131  | 0.081  | 0.058  | 0.034  | -0.033 | -0.037 | 0.9500                |
| $M = 1.301 \quad \alpha = 11.84$ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                           | -0.018 | -0.065 | -0.083 | -0.104 | -0.121 | -0.117 | -0.127 | -0.136 | -0.149 | -0.213 | -0.201 | -0.220 | -0.246 | -0.172 | -0.096 | -0.074 | 0.0500                |
| 0.1500                           | 0.002  | -0.044 | -0.042 | -0.048 | -0.050 | -0.051 | -0.056 | -0.060 | -0.055 | -0.125 | -0.191 | -0.237 | -0.284 | -0.268 | -0.127 | -0.029 | 0.1500                |
| 0.2500                           | 0.022  | 0.000  | -0.012 | -0.017 | -0.025 | -0.024 | -0.030 | -0.030 | -0.018 | -0.058 | -0.137 | -0.187 | -0.209 | -0.234 | -0.227 | -0.035 | 0.2500                |
| 0.3500                           | -0.001 | -0.042 | -0.053 | -0.048 | -0.054 | -0.050 | -0.057 | -0.059 | -0.052 | -0.128 | -0.190 | -0.233 | -0.274 | -0.262 | -0.126 | -0.029 | 0.3500                |
| 0.4500                           | -0.017 | -0.061 | -0.085 | -0.106 | -0.122 | -0.122 | -0.131 | -0.132 | -0.160 | -0.229 | -0.201 | -0.214 | -0.232 | -0.178 | -0.095 | -0.081 | 0.4500                |
| 0.5500                           | 0.080  | 0.046  | -0.004 | -0.051 | -0.064 | -0.077 | -0.095 | -0.105 | 0.219  | 0.240  | 0.224  | 0.193  | 0.185  | 0.109  | -0.038 | -0.060 | 0.5500                |
| 0.6500                           | 0.243  | 0.164  | 0.144  | 0.092  | 0.071  | 0.062  | 0.035  | 0.026  | 0.020  | 0.157  | 0.227  | 0.197  | 0.181  | 0.146  | 0.026  | 0.6500 |                       |
| 0.7500                           | 0.322  | 0.238  | 0.218  | 0.167  | 0.143  | 0.125  | 0.102  | 0.094  | 0.080  | 0.061  | 0.223  | 0.192  | 0.174  | 0.148  | 0.075  | 0.7500 |                       |
| 0.8500                           | 0.250  | 0.166  | 0.146  | 0.090  | 0.073  | 0.057  | 0.032  | 0.027  | 0.011  | 0.128  | 0.220  | 0.193  | 0.178  | 0.139  | 0.030  | -0.037 | 0.8500                |
| 0.9500                           | 0.085  | 0.017  | -0.004 | -0.050 | -0.065 | -0.082 | -0.092 | -0.107 | 0.186  | 0.241  | 0.219  | 0.178  | 0.166  | 0.118  | -0.031 | -0.053 | 0.9500                |
| $M = 1.300 \quad \alpha = 15.87$ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                           | -0.102 | -0.054 | -0.135 | -0.123 | -0.193 | -0.173 | -0.157 | -0.183 | -0.222 | -0.292 | -0.274 | -0.279 | -0.298 | -0.268 | -0.111 | -0.108 | 0.0500                |
| 0.1500                           | -0.071 | -0.135 | -0.129 | -0.182 | -0.114 | -0.154 | -0.155 | -0.115 | -0.082 | -0.168 | -0.256 | -0.314 | -0.363 | -0.331 | -0.138 | -0.053 | 0.1500                |
| 0.2500                           | -0.025 | -0.083 | -0.064 | -0.068 | -0.049 | -0.076 | -0.074 | -0.058 | -0.047 | -0.080 | -0.164 | -0.206 | -0.236 | -0.274 | -0.296 | -0.032 | 0.2500                |
| 0.3500                           | -0.054 | -0.091 | -0.049 | -0.029 | -0.068 | -0.075 | -0.078 | -0.082 | -0.083 | -0.170 | -0.255 | -0.326 | -0.370 | -0.320 | -0.130 | -0.063 | 0.3500                |
| 0.4500                           | -0.088 | -0.134 | -0.151 | -0.139 | -0.184 | -0.195 | -0.189 | -0.153 | -0.242 | -0.293 | -0.282 | -0.272 | -0.290 | -0.266 | -0.102 | -0.109 | 0.4500                |
| 0.5500                           | 0.015  | -0.086 | -0.136 | -0.193 | -0.155 | -0.158 | -0.171 | -0.180 | 0.169  | 0.307  | 0.307  | 0.287  | 0.261  | 0.180  | -0.031 | -0.095 | 0.5500                |
| 0.6500                           | 0.296  | 0.202  | 0.176  | 0.110  | 0.097  | 0.074  | 0.050  | 0.051  | 0.014  | 0.163  | 0.323  | 0.300  | 0.265  | 0.236  | 0.079  | -0.050 | 0.6500                |
| 0.7500                           | 0.412  | 0.287  | 0.214  | 0.195  | 0.177  | 0.141  | 0.099  | 0.140  | 0.126  | 0.110  | 0.326  | 0.301  | 0.268  | 0.254  | 0.143  | 0.7500 |                       |
| 0.8500                           | 0.315  | 0.221  | 0.209  | 0.226  | 0.130  | 0.099  | 0.076  | 0.079  | 0.018  | 0.126  | 0.317  | 0.302  | 0.264  | 0.241  | 0.082  | -0.044 | 0.8500                |
| 0.9500                           | 0.170  | 0.041  | 0.067  | -0.110 | -0.072 | -0.121 | -0.072 | -0.071 | 0.142  | 0.309  | 0.301  | 0.283  | 0.242  | 0.202  | -0.029 | -0.091 | 0.9500                |
| $M = 1.500 \quad \alpha = 03.78$ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                           | 0.083  | 0.040  | 0.033  | 0.014  | 0.004  | -0.011 | -0.020 | -0.017 | -0.001 | -0.075 | -0.061 | -0.092 | -0.122 | -0.119 | -0.059 | -0.042 | 0.0500                |
| 0.1500                           | 0.072  | 0.028  | 0.018  | 0.005  | -0.002 | -0.010 | -0.021 | -0.027 | -0.025 | -0.029 | -0.052 | -0.082 | -0.108 | -0.121 | -0.097 | -0.037 | 0.1500                |
| 0.2500                           | 0.067  | 0.026  | 0.015  | 0.006  | -0.003 | -0.010 | -0.023 | -0.022 | -0.025 | -0.016 | -0.047 | -0.080 | -0.098 | -0.116 | -0.125 | -0.051 | 0.2500                |
| 0.3500                           | 0.066  | 0.026  | 0.013  | 0.003  | -0.003 | -0.008 | -0.022 | -0.026 | -0.020 | -0.031 | -0.055 | -0.086 | -0.103 | -0.123 | -0.091 | -0.040 | 0.3500                |
| 0.4500                           | 0.077  | 0.031  | 0.015  | 0.004  | -0.005 | -0.008 | -0.023 | -0.026 | 0.000  | -0.074 | -0.070 | -0.090 | -0.101 | -0.132 | -0.049 | -0.047 | 0.4500                |
| 0.5500                           | 0.113  | 0.075  | 0.022  | 0.020  | 0.009  | 0.008  | -0.009 | -0.021 | 0.102  | 0.076  | 0.027  | 0.023  | 0.006  | -0.003 | 0.036  | -0.043 | 0.5500                |
| 0.6500                           | 0.142  | 0.083  | 0.067  | 0.040  | 0.021  | 0.024  | 0.014  | -0.001 | 0.005  | 0.045  | 0.041  | 0.024  | 0.007  | 0.002  | -0.026 | -0.043 | 0.6500                |
| 0.7500                           | 0.165  | 0.089  | 0.086  | 0.054  | 0.034  | 0.054  | 0.018  | 0.008  | 0.011  | 0.002  | 0.055  | 0.032  | 0.013  | -0.010 | -0.024 | 0.7500 |                       |
| 0.8500                           | 0.158  | 0.093  | 0.077  | 0.045  | 0.033  | 0.029  | 0.019  | 0.002  | -0.003 | 0.047  | 0.042  | 0.026  | 0.009  | -0.015 | -0.030 | -0.041 | 0.8500                |
| 0.9500                           | 0.122  | 0.065  | 0.050  | 0.024  | 0.012  | 0.006  | 0.001  | -0.013 | 0.087  | 0.066  | 0.030  | 0.008  | 0.006  | -0.020 | -0.037 | -0.042 | 0.9500                |
| $M = 1.703 \quad \alpha = 03.73$ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                           | 0.094  | 0.059  | 0.041  | 0.026  | 0.013  | 0.002  | -0.009 | -0.019 | -0.001 | -0.041 | -0.082 | -0.082 | -0.102 | -0.118 | -0.062 | -0.061 | 0.0500                |
| 0.1500                           | 0.075  | 0.047  | 0.036  | 0.020  | 0.009  | 0.003  | -0.012 | -0.019 | -0.005 | -0.024 | -0.046 | -0.074 | -0.097 | -0.114 | -0.103 | -0.067 | 0.1500                |
| 0.2500                           | 0.065  | 0.050  | 0.034  | 0.014  | 0.006  | 0.002  | -0.011 | -0.012 | -0.003 | -0.026 | -0.034 | -0.071 | -0.093 | -0.111 | -0.121 | -0.085 | 0.2500                |
| 0.3500                           | 0.068  | 0.045  | 0.037  | 0.013  | 0.003  | -0.007 | -0.011 | -0.013 | -0.023 | -0.046 | -0.076 | -0.097 | -0.114 | -0.098 | -0.066 | 0.3500 |                       |
| 0.4500                           | 0.087  | 0.052  | 0.043  | 0.018  | 0.006  | -0.005 | -0.010 | -0.022 | 0.002  | -0.049 | -0.083 | -0.080 | -0.101 | -0.122 | -0.058 | -0.058 | 0.4500                |
| 0.5500                           | 0.123  | 0.118  | 0.058  | 0.040  | 0.029  | 0.006  | -0.004 | -0.014 | 0.081  | 0.061  | 0.064  | 0.018  | -0.003 | -0.015 | -0.047 | -0.054 | 0.5500                |
| 0.6500                           | 0.161  | 0.123  | 0.083  | 0.052  | 0.044  | 0.039  | 0.018  | 0.007  | 0.002  | 0.023  | 0.033  | 0.023  | -0.005 | -0.009 | -0.031 | -0.053 | 0.6500                |
| 0.7500                           | 0.176  | 0.128  | 0.107  | 0.059  | 0.055  | 0.044  | 0.035  | 0.022  | 0.012  | 0.004  | 0.049  | 0.031  | -0.003 | -0.017 | -0.025 | 0.7500 |                       |
| 0.8500                           | 0.167  | 0.116  | 0.083  | 0.053  | 0.054  | 0.040  | 0.035  | 0.021  | 0.003  | 0.023  | 0.033  | 0.023  | 0.004  | -0.017 | -0.035 | -0.057 | 0.8500                |
| 0.9500                           | 0.140  | 0.082  | 0.057  | 0.037  | 0.028  | 0.016  | -0.005 | -0.005 | 0.066  | 0.070  | 0.040  | 0.022  | 0.006  | -0.034 | -0.046 | -0.057 | 0.9500                |



TABLE II.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(d) BW - Continued

| Fraction of body length, x/l |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050 | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$ | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 1.906 $\alpha = 03.93$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.073 | 0.052  | 0.026  | 0.015  | 0.008  | -0.003 | -0.011 | -0.008 | 0.007  | -0.045 | -0.062 | -0.072 | -0.090 | -0.094 | -0.055 | -0.053 | 0.0500                |
| 0.1500                       | 0.067 | 0.032  | 0.023  | 0.005  | 0.004  | -0.006 | -0.007 | -0.007 | -0.007 | -0.015 | -0.044 | -0.057 | -0.086 | -0.095 | -0.085 | -0.060 | 0.1500                |
| 0.2500                       | 0.056 | 0.027  | 0.021  | 0.002  | -0.002 | 0.005  | -0.004 | -0.004 | -0.004 | -0.013 | -0.032 | -0.056 | -0.079 | -0.088 | -0.098 | -0.081 | 0.2500                |
| 0.3500                       | 0.060 | 0.027  | 0.021  | 0.002  | -0.003 | 0.001  | 0.000  | -0.006 | -0.010 | -0.014 | -0.044 | -0.066 | -0.085 | -0.094 | -0.086 | -0.061 | 0.3500                |
| 0.4500                       | 0.075 | 0.033  | 0.033  | 0.005  | 0.001  | -0.004 | -0.007 | -0.013 | 0.008  | -0.053 | -0.063 | -0.069 | -0.088 | -0.102 | -0.054 | -0.051 | 0.4500                |
| 0.5500                       | 0.112 | 0.113  | 0.043  | 0.026  | 0.018  | 0.007  | 0.003  | -0.004 | 0.078  | 0.076  | 0.039  | 0.021  | 0.003  | 0.003  | -0.045 | -0.048 | 0.5500                |
| 0.6500                       | 0.139 | 0.096  | 0.061  | 0.050  | 0.032  | 0.019  | 0.022  | 0.020  | 0.020  | 0.027  | 0.041  | 0.024  | 0.008  | -0.007 | -0.022 | -0.047 | 0.6500                |
| 0.7500                       | 0.151 | 0.111  | 0.078  | 0.061  | 0.047  | 0.038  | 0.049  | 0.033  | 0.030  | 0.017  | 0.045  | 0.022  | 0.012  | -0.004 | -0.020 | -0.047 | 0.7500                |
| 0.8500                       | 0.153 | 0.111  | 0.075  | 0.053  | 0.035  | 0.029  | 0.036  | 0.019  | 0.012  | 0.025  | 0.040  | 0.022  | 0.008  | -0.005 | -0.031 | -0.047 | 0.8500                |
| 0.9500                       | 0.107 | 0.064  | 0.052  | 0.025  | 0.016  | 0.011  | 0.011  | -0.002 | 0.064  | 0.078  | 0.048  | 0.017  | 0.008  | -0.010 | -0.043 | -0.049 | 0.9500                |
| M = 2.229 $\alpha = 03.88$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.101 | 0.058  | 0.047  | 0.027  | 0.023  | 0.014  | 0.003  | -0.004 | 0.044  | 0.051  | 0.018  | 0.004  | -0.008 | -0.009 | -0.033 | -0.035 | 0.0500                |
| 0.1500                       | 0.137 | 0.080  | 0.066  | 0.047  | 0.035  | 0.028  | 0.022  | 0.016  | 0.001  | 0.008  | 0.019  | 0.022  | 0.003  | 0.001  | -0.023 | -0.031 | 0.1500                |
| 0.2500                       | 0.142 | 0.089  | 0.073  | 0.056  | 0.043  | 0.037  | 0.031  | 0.023  | 0.012  | 0.003  | 0.013  | 0.022  | 0.005  | 0.001  | -0.016 | -0.025 | 0.2500                |
| 0.3500                       | 0.128 | 0.079  | 0.065  | 0.043  | 0.034  | 0.031  | 0.026  | 0.015  | 0.009  | -0.003 | 0.020  | 0.015  | 0.005  | -0.003 | -0.020 | -0.027 | 0.3500                |
| 0.4500                       | 0.101 | 0.059  | 0.045  | 0.028  | 0.020  | 0.016  | 0.005  | -0.003 | 0.044  | 0.047  | 0.024  | 0.013  | 0.001  | -0.014 | -0.027 | -0.029 | 0.4500                |
| 0.5500                       | 0.074 | 0.124  | 0.027  | 0.014  | 0.005  | 0.001  | -0.009 | -0.017 | 0.009  | -0.025 | -0.038 | -0.045 | -0.054 | -0.050 | -0.036 | -0.034 | 0.5500                |
| 0.6500                       | 0.060 | 0.026  | 0.019  | 0.005  | -0.004 | -0.004 | -0.010 | -0.010 | -0.004 | -0.007 | -0.034 | -0.043 | -0.054 | -0.054 | -0.056 | -0.042 | 0.6500                |
| 0.7500                       | 0.055 | 0.025  | 0.018  | 0.005  | -0.004 | -0.001 | -0.009 | -0.010 | -0.005 | -0.010 | -0.016 | -0.039 | -0.048 | -0.055 | -0.065 | -0.065 | 0.7500                |
| 0.8500                       | 0.058 | 0.028  | 0.016  | 0.007  | -0.001 | -0.005 | -0.007 | -0.009 | -0.009 | -0.010 | -0.026 | -0.039 | -0.051 | -0.059 | -0.066 | -0.059 | 0.8500                |
| 0.9500                       | 0.072 | 0.037  | 0.027  | 0.015  | 0.006  | -0.003 | -0.007 | -0.009 | 0.005  | -0.025 | -0.045 | -0.047 | -0.051 | -0.063 | -0.044 | -0.046 | 0.9500                |
| M = 2.226 $\alpha = 00.25$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.091 | 0.065  | 0.049  | 0.030  | 0.030  | 0.015  | 0.012  | 0.004  | 0.026  | 0.004  | -0.026 | -0.029 | -0.041 | -0.040 | -0.034 | -0.034 | 0.0500                |
| 0.1500                       | 0.099 | 0.054  | 0.042  | 0.026  | 0.021  | 0.013  | 0.008  | 0.003  | -0.011 | -0.004 | -0.017 | -0.014 | -0.036 | -0.035 | -0.049 | -0.044 | 0.1500                |
| 0.2500                       | 0.097 | 0.051  | 0.039  | 0.025  | 0.018  | 0.013  | 0.006  | 0.003  | -0.007 | -0.018 | -0.004 | -0.015 | -0.035 | -0.032 | -0.047 | -0.052 | 0.2500                |
| 0.3500                       | 0.092 | 0.051  | 0.039  | 0.026  | 0.017  | 0.014  | 0.012  | 0.003  | -0.002 | -0.009 | -0.013 | -0.022 | -0.036 | -0.037 | -0.052 | -0.041 | 0.3500                |
| 0.4500                       | 0.093 | 0.055  | 0.037  | 0.027  | 0.018  | 0.015  | 0.011  | 0.004  | 0.024  | 0.004  | -0.025 | -0.025 | -0.040 | -0.047 | -0.033 | -0.032 | 0.4500                |
| 0.5500                       | 0.098 | 0.132  | 0.041  | 0.028  | 0.021  | 0.015  | 0.007  | 0.002  | 0.030  | 0.025  | -0.004 | -0.019 | -0.026 | -0.021 | -0.030 | -0.032 | 0.5500                |
| 0.6500                       | 0.102 | 0.056  | 0.046  | 0.029  | 0.023  | 0.016  | 0.008  | 0.000  | 0.004  | 0.009  | -0.002 | -0.008 | -0.018 | -0.023 | -0.037 | -0.040 | 0.6500                |
| 0.7500                       | 0.105 | 0.055  | 0.048  | 0.031  | 0.024  | 0.016  | 0.009  | 0.001  | 0.008  | -0.004 | 0.015  | -0.007 | -0.015 | -0.022 | -0.033 | -0.033 | 0.7500                |
| 0.8500                       | 0.106 | 0.054  | 0.050  | 0.027  | 0.021  | 0.017  | 0.008  | 0.005  | -0.001 | 0.007  | 0.005  | -0.010 | -0.020 | -0.029 | -0.037 | -0.036 | 0.8500                |
| 0.9500                       | 0.103 | 0.055  | 0.045  | 0.030  | 0.020  | 0.016  | 0.007  | 0.005  | 0.032  | 0.023  | -0.008 | -0.018 | -0.018 | -0.032 | -0.030 | -0.031 | 0.9500                |
| M = 2.229 $\alpha = 04.13$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.069 | 0.037  | 0.025  | 0.011  | 0.008  | -0.005 | -0.010 | -0.015 | -0.007 | -0.049 | -0.065 | -0.066 | -0.077 | -0.065 | -0.042 | -0.042 | 0.0500                |
| 0.1500                       | 0.071 | 0.027  | 0.015  | 0.007  | 0.000  | -0.006 | -0.012 | -0.015 | -0.024 | -0.025 | -0.049 | -0.055 | -0.073 | -0.075 | -0.080 | -0.049 | 0.1500                |
| 0.2500                       | 0.067 | 0.023  | 0.015  | 0.008  | 0.002  | -0.003 | -0.008 | -0.014 | -0.021 | -0.028 | -0.032 | -0.052 | -0.069 | -0.072 | -0.081 | -0.068 | 0.2500                |
| 0.3500                       | 0.055 | 0.023  | 0.015  | 0.004  | -0.001 | -0.002 | -0.004 | -0.015 | -0.019 | -0.025 | -0.043 | -0.058 | -0.071 | -0.075 | -0.082 | -0.076 | 0.3500                |
| 0.4500                       | 0.069 | 0.035  | 0.020  | 0.008  | 0.002  | -0.005 | -0.011 | -0.018 | -0.014 | -0.049 | -0.068 | -0.061 | -0.076 | -0.081 | -0.056 | -0.055 | 0.4500                |
| 0.5500                       | 0.104 | 0.137  | 0.046  | 0.022  | 0.017  | 0.006  | 0.000  | -0.008 | 0.031  | 0.060  | 0.043  | 0.014  | 0.002  | 0.021  | -0.038 | -0.042 | 0.5500                |
| 0.6500                       | 0.140 | 0.080  | 0.077  | 0.052  | 0.040  | 0.030  | 0.019  | 0.005  | 0.004  | 0.011  | 0.025  | 0.025  | 0.016  | 0.013  | -0.012 | -0.034 | 0.6500                |
| 0.7500                       | 0.157 | 0.102  | 0.084  | 0.067  | 0.048  | 0.045  | 0.031  | 0.025  | 0.012  | 0.009  | 0.022  | 0.029  | 0.019  | 0.011  | -0.003 | -0.033 | 0.7500                |
| 0.8500                       | 0.152 | 0.096  | 0.080  | 0.059  | 0.041  | 0.035  | 0.026  | 0.020  | 0.006  | 0.005  | 0.035  | 0.024  | 0.016  | 0.008  | -0.002 | -0.017 | 0.8500                |
| 0.9500                       | 0.113 | 0.065  | 0.052  | 0.027  | 0.019  | 0.011  | 0.009  | -0.005 | 0.029  | 0.060  | 0.032  | 0.016  | 0.017  | 0.003  | -0.023 | -0.030 | 0.9500                |
| M = 2.264 $\alpha = 08.26$   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.037 | 0.007  | 0.001  | -0.023 | -0.031 | -0.042 | -0.049 | -0.058 | -0.056 | -0.098 | -0.092 | -0.085 | -0.090 | -0.073 | -0.056 | -0.052 | 0.0500                |
| 0.1500                       | 0.034 | 0.001  | -0.013 | -0.021 | -0.023 | -0.030 | -0.033 | -0.035 | -0.037 | -0.044 | -0.077 | -0.082 | -0.103 | -0.096 | -0.088 | -0.056 | 0.1500                |
| 0.2500                       | 0.027 | -0.002 | -0.007 | -0.006 | -0.011 | -0.024 | -0.019 | -0.027 | -0.029 | -0.031 | -0.051 | -0.069 | -0.090 | -0.094 | -0.103 | -0.106 | 0.2500                |
| 0.3500                       | 0.022 | -0.003 | -0.005 | -0.011 | -0.022 | -0.022 | -0.022 | -0.030 | -0.029 | -0.045 | -0.073 | -0.089 | -0.102 | -0.103 | -0.094 | -0.061 | 0.3500                |
| 0.4500                       | 0.037 | -0.001 | -0.011 | -0.031 | -0.036 | -0.044 | -0.048 | -0.052 | -0.060 | -0.102 | -0.093 | -0.081 | -0.096 | -0.096 | -0.057 | -0.054 | 0.4500                |
| 0.5500                       | 0.097 | 0.139  | 0.015  | 0.011  | -0.003 | -0.012 | -0.018 | -0.031 | -0.015 | 0.092  | 0.098  | 0.065  | 0.046  | 0.057  | -0.021 | -0.032 | 0.5500                |
| 0.6500                       | 0.181 | 0.131  | 0.104  | 0.073  | 0.060  | 0.049  | 0.031  | 0.024  | 0.020  | 0.026  | 0.073  | 0.069  | 0.063  | 0.059  | 0.040  | 0.003  | 0.6500                |
| 0.7500                       | 0.234 | 0.166  | 0.139  | 0.104  | 0.090  | 0.079  | 0.073  | 0.060  | 0.055  | 0.040  | 0.044  | 0.078  | 0.067  | 0.060  | 0.048  | -0.003 | 0.7500                |
| 0.8500                       | 0.223 | 0.149  | 0.127  | 0.085  | 0.068  | 0.058  | 0.050  | 0.038  | 0.023  | 0.017  | 0.079  | 0.072  | 0.070  | 0.055  | 0.042  | 0.014  | 0.8500                |
| 0.9500                       | 0.137 | 0.077  | 0.048  | 0.018  | 0.003  | 0.000  | -0.020 | -0.005 | -0.010 | 0.111  | 0.084  | 0.069  | 0.068  | 0.052  | -0.017 | -0.028 | 0.9500                |

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TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION  
(a) BVW

| x/c                        | 2y/b = 0.200               |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|----------------------------|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                            | C <sub>pu</sub>            | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
|                            | M = 0.701      α = -0.4.28 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                     | 0.218                      | -0.458          | -0.676          | 0.182           | -0.740          | -0.922          | 0.178           | -0.703          | -0.881          |                 |                 |                 | 0.062           | -0.727          | -0.790          | 0.193           | -0.663          | -0.856          | 0.151           | -0.597          |                 | 0.0000 |
| 0.0125                     | 0.150                      | -0.332          | -0.482          | 0.141           | -0.488          | -0.629          | 0.140           | -0.579          | -0.719          | 0.136           | -0.695          | -0.831          | 0.111           | -0.736          | -0.847          | 0.168           | -0.663          | -0.831          | 0.155           |                 |                 | 0.0125 |
| 0.0250                     | 0.100                      | -0.250          | -0.350          | 0.107           | -0.324          | -0.431          | 0.108           | -0.471          | -0.578          | 0.105           | -0.387          | -0.492          | 0.132           | -0.680          | -0.812          |                 | -0.665          |                 | 0.152           |                 |                 | 0.0250 |
| 0.0420                     |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                     | 0.060                      | -0.216          | -0.276          | 0.064           | -0.261          | -0.324          | 0.061           | -0.300          | -0.361          |                 | -0.334          |                 | 0.091           | -0.370          | -0.461          | 0.108           | -0.671          | -0.779          | 0.122           | -0.565          |                 | 0.0500 |
| 0.0640                     |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                     | 0.045                      | -0.207          | -0.253          | 0.039           | -0.242          | -0.281          | 0.041           | -0.278          | -0.319          | 0.037           |                 |                 | 0.055           | -0.310          | -0.365          | 0.082           | -0.689          | -0.771          | 0.101           | -0.562          |                 | 0.0750 |
| 0.0810                     |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                     | 0.028                      | -0.203          | -0.231          | 0.024           | -0.231          | -0.256          | 0.024           | -0.270          | -0.293          | 0.019           | -0.281          | -0.301          | 0.031           | -0.295          | -0.327          | 0.065           | -0.700          | -0.765          | 0.088           | -0.564          | -0.655          | 0.1000 |
| 0.1500                     | 0.009                      | -0.193          | -0.202          | 0.005           | -0.212          | -0.218          | 0.008           | -0.245          | -0.253          | 0.001           | -0.257          | -0.258          | 0.012           | -0.280          | -0.292          | 0.042           | -0.613          | -0.655          | 0.067           | -0.568          | -0.635          | 0.1500 |
| 0.2000                     | -0.002                     | -0.192          | -0.190          |                 | -0.201          | -0.201          | 0.001           | -0.223          | -0.224          | -0.005          |                 |                 | 0.007           | -0.254          | -0.261          | 0.029           | -0.418          | -0.448          | 0.046           | -0.571          | -0.617          | 0.2000 |
| 0.3000                     | -0.020                     | -0.197          | -0.177          | -0.020          | -0.195          | -0.175          | -0.020          | -0.215          | -0.195          |                 |                 |                 | -0.006          | -0.223          | -0.216          | 0.022           | -0.204          | -0.225          | 0.020           | -0.588          | -0.608          | 0.3000 |
| 0.4000                     | -0.025                     | -0.196          | -0.171          | -0.025          | -0.190          | -0.165          | -0.023          | -0.206          | -0.183          |                 |                 |                 | -0.014          | -0.200          | -0.185          | 0.022           | -0.198          | -0.219          | -0.004          | -0.592          | -0.588          | 0.4000 |
| 0.5000                     | -0.033                     | -0.182          | -0.149          | -0.027          | -0.182          | -0.156          | -0.025          | -0.191          | -0.166          |                 |                 |                 | -0.010          | -0.194          | -0.184          | -0.011          | -0.178          | -0.167          | -0.014          | -0.554          | -0.540          | 0.5000 |
| 0.6000                     |                            | -0.171          |                 | -0.023          | -0.148          | -0.125          | -0.020          | -0.148          | -0.128          |                 |                 |                 | -0.002          | -0.166          | -0.164          | -0.047          | -0.162          | -0.115          | -0.023          | -0.469          | -0.446          | 0.6000 |
| 0.7000                     | -0.022                     |                 |                 | -0.033          | -0.115          | -0.082          | -0.036          | -0.114          | -0.078          |                 |                 |                 | -0.001          | -0.143          | -0.142          | -0.065          | -0.134          | -0.069          | -0.029          | -0.330          | -0.301          | 0.7000 |
| 0.8000                     | -0.037                     | -0.120          | -0.083          | -0.033          | -0.115          | -0.082          | -0.036          | -0.114          | -0.078          |                 |                 |                 | -0.034          | -0.122          | -0.089          | -0.064          | -0.104          | -0.041          | -0.033          | -0.178          | -0.145          | 0.8000 |
| 0.9000                     | -0.031                     | -0.070          | -0.039          | -0.028          | -0.064          | -0.035          | -0.035          | -0.069          | -0.035          |                 |                 |                 | -0.033          | -0.077          | -0.044          | -0.043          | -0.062          | -0.019          | -0.046          | -0.059          | -0.013          | 0.9000 |
| 1.0000                     | -0.006                     | -0.003          | 0.003           | -0.008          | 0.007           | 0.015           | -0.016          | -0.013          | 0.003           |                 |                 |                 | 0.001           | -0.008          | -0.008          | -0.002          | -0.006          | -0.004          | -0.068          | 0.028           | 0.096           | 1.0000 |
| M = 0.698      α = -0.0.20 |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                     | 0.008                      | 0.026           | 0.017           | -0.063          | -0.004          | 0.058           | -0.075          | -0.033          | 0.042           |                 |                 |                 | -0.056          | -0.075          | -0.019          | -0.098          | -0.010          | 0.089           | -0.099          | -0.128          |                 | 0.0000 |
| 0.0125                     | -0.041                     | -0.007          | 0.034           | -0.078          | -0.034          | 0.044           | -0.082          | -0.049          | 0.033           | -0.095          | -0.046          | 0.049           | -0.091          | -0.065          | 0.026           | -0.107          | -0.048          | 0.058           | -0.107          |                 |                 | 0.0125 |
| 0.0250                     | -0.073                     | -0.032          | 0.042           | -0.089          | -0.055          | 0.034           | -0.088          | -0.062          | 0.026           | -0.111          | -0.073          | 0.038           | -0.114          | -0.064          | 0.050           |                 | -0.077          |                 | -0.114          |                 |                 | 0.0250 |
| 0.0420                     |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                     | -0.087                     | -0.059          | 0.028           | -0.096          | -0.075          | 0.021           | -0.097          | -0.079          | 0.018           |                 | -0.094          |                 | -0.121          | -0.086          | 0.035           | -0.125          | -0.101          | 0.025           | -0.126          | -0.103          |                 | 0.0500 |
| 0.0640                     |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                     | -0.085                     | -0.073          | 0.012           | -0.102          | -0.083          | 0.019           | -0.110          | -0.088          | 0.022           | -0.123          |                 |                 | -0.123          | -0.093          | 0.031           | -0.133          | -0.105          | 0.028           | -0.125          | -0.101          |                 | 0.0750 |
| 0.0810                     |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                     | -0.093                     | -0.078          | 0.015           | -0.103          | -0.089          | 0.014           | -0.113          | -0.098          | 0.015           | -0.126          | -0.101          | 0.025           | -0.128          | -0.098          | 0.030           | -0.129          | -0.109          | 0.020           | -0.122          | -0.102          | 0.020           | 0.1000 |
| 0.1500                     | -0.098                     | -0.077          | 0.022           | -0.109          | -0.094          | 0.015           | -0.115          | -0.101          | 0.013           | -0.123          | -0.106          | 0.016           | -0.127          | -0.102          | 0.025           | -0.123          | -0.109          | 0.014           | -0.119          | -0.101          | 0.018           | 0.1500 |
| 0.2000                     | -0.096                     | -0.084          | 0.012           | -0.105          | -0.095          | 0.010           | -0.107          | -0.096          | 0.011           | -0.121          |                 |                 | -0.123          | -0.105          | 0.018           | -0.114          | -0.106          | 0.008           | -0.116          | -0.106          | 0.010           | 0.2000 |
| 0.3000                     | -0.113                     | -0.099          | -0.014          | -0.110          | -0.098          | 0.007           | -0.110          | -0.103          | 0.007           |                 |                 |                 | -0.118          | -0.106          | 0.012           | -0.091          | -0.110          | -0.019          | -0.110          | -0.104          | 0.005           | 0.3000 |
| 0.4000                     | -0.106                     | -0.107          | -0.001          | -0.106          | -0.098          | -0.005          | -0.089          | -0.097          | -0.008          |                 |                 |                 | -0.105          | -0.103          | 0.002           | -0.056          | -0.106          | -0.049          | -0.108          | -0.098          | 0.010           | 0.4000 |
| 0.5000                     | -0.107                     | -0.101          | 0.006           | -0.085          | -0.103          | -0.007          | -0.089          | -0.100          | -0.001          |                 |                 |                 | -0.090          | -0.096          | -0.006          | -0.060          | -0.092          | -0.033          | -0.095          | -0.088          | 0.007           | 0.5000 |
| 0.6000                     |                            | -0.099          |                 | -0.085          | -0.100          | -0.015          | -0.089          | -0.100          | -0.001          |                 |                 |                 | -0.069          | -0.092          | -0.023          | -0.076          | -0.085          | -0.009          | -0.084          | -0.080          | 0.004           | 0.6000 |
| 0.7000                     | -0.084                     |                 |                 | -0.085          | -0.090          | -0.006          | -0.086          | -0.088          | -0.002          |                 |                 |                 | -0.088          | -0.083          | 0.005           | -0.084          | -0.072          | 0.012           | -0.071          | -0.066          | 0.005           | 0.7000 |
| 0.8000                     | -0.094                     | -0.078          | 0.016           | -0.092          | -0.073          | 0.019           | -0.096          | -0.077          | 0.019           |                 |                 |                 | -0.113          | -0.070          | 0.043           | -0.071          | -0.059          | 0.012           | -0.050          | -0.047          | 0.004           | 0.8000 |
| 0.9000                     | -0.072                     | -0.048          | 0.025           | -0.071          | -0.040          | 0.031           | -0.083          | -0.046          | 0.037           | -0.078          | -0.033          | 0.045           | -0.078          | -0.033          | 0.045           | -0.042          | -0.034          | 0.008           | -0.039          | -0.017          | 0.022           | 0.9000 |
| 1.0000                     | -0.019                     | -0.004          | 0.016           | -0.020          | 0.010           | 0.030           | -0.047          | 0.004           | 0.051           | 0.019           | 0.028           | 0.009           | 0.019           | 0.028           | 0.009           | 0.005           |                 | -0.036          | 0.024           | 0.059           | 1.0000          |        |
| M = 0.697      α = 0.3.78  |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                     | -0.373                     | 0.222           | 0.595           | -0.643          | 0.219           | 0.862           | -0.887          | 0.175           | 1.061           |                 |                 |                 | -0.630          | 0.213           | 0.842           | -0.668          | 0.188           | 0.855           | -0.516          | 0.156           |                 | 0.0000 |
| 0.0125                     | -0.338                     | 0.179           | 0.518           | -0.540          | 0.169           | 0.710           | -0.666          | 0.165           | 0.831           | -0.806          | 0.168           | 0.973           | -0.751          | 0.175           | 0.926           | -0.664          | 0.179           | 0.843           | -0.519          |                 |                 | 0.0125 |
| 0.0250                     | -0.305                     | 0.144           | 0.449           | -0.444          | 0.131           | 0.575           | -0.496          | 0.148           | 0.644           | -0.551          | 0.130           | 0.681           | -0.768          | 0.146           | 0.914           |                 | 0.167           |                 | -0.521          |                 |                 | 0.0250 |
| 0.0420                     |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                     | -0.239                     | 0.097           | 0.336           | -0.270          | 0.087           | 0.358           | -0.303          | 0.096           | 0.400           |                 | 0.087           |                 | -0.485          | 0.115           | 0.600           | -0.665          | 0.131           | 0.796           | -0.520          | 0.157           |                 | 0.0500 |
| 0.0640                     |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                     | -0.211                     | 0.069           | 0.281           | -0.251          | 0.063           | 0.314           | -0.287          | 0.071           | 0.358           | -0.318          |                 |                 | -0.329          | 0.086           | 0.414           | -0.676          | 0.101           | 0.778           | -0.519          | 0.143           |                 | 0.0750 |
| 0.0810                     |                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                     | -0.209                     | 0.055           | 0.264           | -0.237          | 0.044           | 0.281           | -0.281          | 0.048           | 0.328           | -0.294          | 0.046           | 0.341           | -0.302          | 0.066           | 0.369           | -0.683          | 0.081           | 0.764           | -0.519          | 0.126           |                 | 0.1000 |
| 0.1500                     | -0.203                     | 0.039           | 0.242           | -0.220          | 0.031           | 0.251           | -0.242          | 0.029           | 0.271           | -0.259          | 0.025           | 0.284           | -0.275          | 0.045           | 0.320           | -0.668          | 0.057           | 0.725           | -0.517          | 0.096           | 0.635           | 0.1500 |
| 0.2000                     | -0.191                     | 0.024           | 0.215           | -0.205          | 0.024           | 0.229           | -0.221          | 0.029           | 0.250           | -0.240          |                 |                 | -0.250          | 0.035           | 0.285           | -0.536          | 0.044           | 0.580           | -0.521          | 0.074           | 0.595           | 0.2000 |
| 0.3000                     | -0.202                     | 0.001           | 0.203           | -0.202          | 0.002           | 0.204           | -0.207          | 0.001           | 0.208           |                 |                 |                 | -0.223          | 0.013           | 0.236           | -0.187          | 0.016           | 0.203           | -0.530          | 0.046           | 0.576           | 0.3000 |
| 0.4000                     | -0.185                     | -0.016          | 0.169           | -0.185          | -0.009          | 0.177           | -0.186          | -0.010          | 0.176           |                 |                 |                 | -0.205          | 0.005           | 0.210           | -0.109          | 0.005           | 0.114           | -0.548          | 0.029           | 0.577           | 0.4000 |
| 0.5000                     | -0.174                     | -0.020          | 0.154           | -0.169          | -0.021          | 0.147           | -0.170          | -0.020          | 0.151           |                 |                 |                 | -0.175          | -0.006          | 0.168           | -0.106          | 0.002           | 0.108           | -0.525          | 0.017           | 0.542           | 0.5000 |
| 0.6000                     |                            | -0.027          |                 | -0.145          | -0.029          | 0.116           | -0.155          | -0.024          | 0.130           |                 |                 |                 | -0.123          | -0.014          | 0.109           | -0.109          | -0.010          | 0.099           | -0.473          | 0.007           | 0.478           | 0.6000 |
| 0.7000                     | -0.135                     |                 |                 | -0.140          | -0.029          | 0.111           | -0.144          | -0.026          | 0.118           |                 |                 |                 | -0.160          | -0.019          | 0.141           | -0.101          | -0.011          | 0.090           | -0.387          | -0.001          | 0.386           | 0.7000 |
| 0.8000                     | -0.138                     | -0.032          | 0.106           | -0.138          | -0.027          | 0.091           | -0.115          | -0.026          | 0.124           |                 |                 |                 | -0.173          | -0.016          | 0.158           | -0.080          | -0.013          | 0.067           | -0.256          | -0.006          | 0.250           | 0.8000 |
| 0.9000                     | -0.102                     | -0.010.         |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

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| x/c                      | 2y/b = 0.200             |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub>          | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
|                          | M = 0.701      α = 07.66 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.915                   | 0.264           | 2.179           | -0.994          | 0.213           | 1.207           | -1.071          | 0.177           | 1.249           | -0.974          | 0.177           | 1.152           | -0.910          | 0.172           | 1.082           | -0.796          | 0.044           | 0.840           | -0.613          | 0.096           |                 | 0.0000 |
| 0.0125                   | -1.078                   | 0.281           | 1.359           | -1.170          | 0.238           | 1.408           | -1.040          | 0.203           | 1.243           | -0.974          | 0.177           | 1.206           | -0.920          | 0.175           | 1.095           | -0.792          | 0.138           | 0.930           | -0.611          |                 | 0.0125          |        |
| 0.0250                   | -0.550                   | 0.281           | 0.831           | -1.226          | 0.247           | 1.473           | -1.051          | 0.217           | 1.269           | -0.985          | 0.222           |                 | -0.934          | 0.184           | 1.118           |                 | 0.198           |                 | -0.610          |                 | 0.0250          |        |
| 0.0420                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.422                   | 0.233           | 0.655           | -0.975          | 0.217           | 1.192           | -1.202          | 0.210           | 1.412           |                 | 0.206           |                 | -0.970          | 0.221           | 1.191           | -0.797          | 0.211           | 1.008           | -0.610          |                 | 0.0500          |        |
| 0.0640                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.382                   | 0.199           | 0.581           | -0.365          | 0.190           | 0.554           | -1.234          | 0.197           | 1.431           | -1.230          |                 |                 | -1.076          | 0.210           | 1.286           | -0.815          | 0.201           | 1.016           | -0.611          |                 | 0.0750          |        |
| 0.0810                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.364                   | 0.178           | 0.542           | -0.327          | 0.168           | 0.494           | -0.892          | 0.175           | 1.067           | -1.284          | 0.168           | 1.452           | -1.177          | 0.187           | 1.364           | -0.827          | 0.184           | 1.012           | -0.610          | 0.194           | 0.805           | 0.1000 |
| 0.1500                   | -0.344                   | 0.154           | 0.497           | -0.328          | 0.145           | 0.473           | -0.247          | 0.146           | 0.394           | -0.805          | 0.142           | 0.947           | -1.212          | 0.173           | 1.385           | -0.850          | 0.162           | 1.012           | -0.608          | 0.180           | 0.788           | 0.1500 |
| 0.2000                   | -0.319                   | 0.133           | 0.452           | -0.314          | 0.130           | 0.444           | -0.280          | 0.130           | 0.410           | -0.260          |                 |                 | -0.880          | 0.135           | 1.015           | -0.891          | 0.142           | 1.033           | -0.610          | 0.164           | 0.774           | 0.2000 |
| 0.3000                   | -0.321                   | 0.097           | 0.418           | -0.304          | 0.099           | 0.403           | -0.295          | 0.092           | 0.388           |                 |                 |                 | -0.209          | 0.116           | 0.325           | -1.113          | 0.109           | 1.222           | -0.620          | 0.135           | 0.755           | 0.3000 |
| 0.4000                   | -0.278                   | 0.071           | 0.350           | -0.275          | 0.077           | 0.352           | -0.298          | 0.076           | 0.374           |                 |                 |                 | -0.204          | 0.095           | 0.299           | -1.097          | 0.084           | 1.180           | -0.612          | 0.108           | 0.719           | 0.4000 |
| 0.5000                   | -0.257                   | 0.059           | 0.316           | -0.244          | 0.058           | 0.302           | -0.249          | 0.059           | 0.318           |                 |                 |                 | -0.211          | 0.071           | 0.282           | -0.837          | 0.072           | 0.908           | -0.577          | 0.082           | 0.659           | 0.5000 |
| 0.6000                   |                          | 0.041           |                 | -0.202          | 0.039           | 0.241           | -0.207          | 0.050           | 0.257           |                 |                 |                 | -0.156          | 0.047           | 0.203           | -0.381          | 0.050           | 0.430           | -0.555          | 0.049           | 0.605           | 0.6000 |
| 0.7000                   | -0.177                   |                 |                 | -0.175          | 0.025           | 0.200           | -0.185          | 0.033           | 0.218           |                 |                 |                 | -0.137          | 0.034           | 0.171           | -0.106          | 0.036           | 0.142           | -0.590          | 0.027           | 0.617           | 0.7000 |
| 0.8000                   | -0.162                   | 0.013           | 0.175           | -0.158          | 0.016           | 0.174           | -0.169          | 0.021           | 0.190           |                 |                 |                 | -0.185          | 0.025           | 0.210           | -0.002          | 0.018           | 0.020           | -0.651          | -0.010          | 0.641           | 0.8000 |
| 0.9000                   | -0.116                   | 0.008           | 0.124           | -0.115          | 0.019           | 0.134           | -0.134          | 0.015           | 0.149           |                 |                 |                 | -0.134          | 0.022           | 0.156           | 0.045           | 0.012           | -0.033          | -0.663          | -0.085          | 0.577           | 0.9000 |
| 1.0000                   | -0.039                   | 0.010           | 0.049           | -0.046          | 0.033           | 0.080           | -0.080          | 0.014           | 0.094           |                 |                 |                 | 0.015           | 0.026           | 0.011           | 0.036           | 0.020           | -0.016          | -0.625          | -0.199          | 0.427           | 1.0000 |
| M = 0.697      α = 11.79 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.783                   | 0.252           | 1.035           | -1.386          | 0.133           | 1.519           | -1.396          | 0.018           | 1.414           | -1.153          | -0.049          | 1.104           | -0.930          | -0.123          | 0.807           | -0.395          | 0.079           |                 |                 |                 | 0.0000          |        |
| 0.0125                   | -1.690                   | 0.351           | 2.041           | -1.464          | 0.251           | 1.715           | -1.397          | 0.180           | 1.577           | -1.267          | 0.107           | 1.374           | -0.922          | 0.059           | 0.981           | -0.405          |                 |                 |                 |                 | 0.0125          |        |
| 0.0250                   | -1.967                   | 0.404           | 2.371           | -1.513          | 0.323           | 1.836           | -1.397          | 0.280           | 1.677           | -1.258          | 0.254           | 1.512           | -1.165          | 0.245           | 1.410           | 0.181           | -0.414          |                 |                 |                 | 0.0250          |        |
| 0.0420                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.631                   | 0.374           | 1.005           | -1.528          | 0.327           | 1.855           | -1.394          | 0.295           | 1.689           |                 | 0.289           |                 | -1.184          | 0.272           | 1.456           | -0.902          | 0.247           | 1.149           | -0.424          |                 | 0.0500          |        |
| 0.0640                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.525                   | 0.340           | 0.865           | -1.558          | 0.308           | 1.867           | -1.414          | 0.296           | 1.709           | -1.315          |                 |                 | -1.233          | 0.291           | 1.524           | -0.893          | 0.264           | 1.158           | -0.433          |                 | 0.0750          |        |
| 0.0810                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.527                   | 0.317           | 0.844           | -1.310          | 0.291           | 1.600           | -1.697          | 0.286           | 1.983           | -1.395          | 0.272           | 1.667           | -1.249          | 0.280           | 1.529           | -0.873          | 0.258           | 1.131           | -0.443          | 0.207           | 0.650           | 0.1000 |
| 0.1500                   | -0.504                   | 0.281           | 0.785           | -0.530          | 0.263           | 0.794           | -1.447          | 0.258           | 1.705           | -1.860          | 0.246           | 2.106           | -1.350          | 0.251           | 1.601           | -0.855          | 0.245           | 1.100           | -0.458          | 0.199           | 0.657           | 0.1500 |
| 0.2000                   | -0.431                   | 0.249           | 0.680           | -0.381          | 0.244           | 0.625           | -0.625          | 0.245           | 0.870           | -1.445          |                 |                 | -1.812          | 0.243           | 2.056           | -0.811          | 0.227           | 1.038           | -0.477          | 0.185           | 0.662           | 0.2000 |
| 0.3000                   | -0.404                   | 0.203           | 0.607           | -0.359          | 0.204           | 0.563           | -0.331          | 0.207           | 0.538           |                 |                 |                 | -0.980          | 0.203           | 1.183           | -0.638          | 0.186           | 0.824           | -0.512          | 0.151           | 0.663           | 0.3000 |
| 0.4000                   | -0.329                   | 0.164           | 0.493           | -0.307          | 0.175           | 0.482           | -0.288          | 0.174           | 0.462           |                 |                 |                 | -0.366          | 0.173           | 0.540           | -0.540          | 0.149           | 0.689           | -0.526          | 0.116           | 0.641           | 0.4000 |
| 0.5000                   | -0.262                   | 0.141           | 0.403           | -0.239          | 0.143           | 0.382           | -0.219          | 0.156           | 0.375           |                 |                 |                 | -0.145          | 0.144           | 0.289           | -0.780          | 0.121           | 0.901           | -0.515          | 0.082           | 0.597           | 0.5000 |
| 0.6000                   |                          | 0.110           |                 | -0.159          | 0.110           | 0.269           | -0.146          | 0.134           | 0.280           |                 |                 |                 | 0.040           | 0.106           | 0.066           | -0.657          | 0.079           | 0.736           | -0.505          | 0.038           | 0.543           | 0.6000 |
| 0.7000                   | -0.123                   |                 |                 | -0.104          | 0.078           | 0.182           | -0.079          | 0.107           | 0.186           |                 |                 |                 | 0.049           | 0.070           | 0.021           | -0.483          | 0.043           | 0.526           | -0.492          | -0.003          | 0.489           | 0.7000 |
| 0.8000                   | -0.134                   | 0.038           | 0.173           | -0.129          | 0.046           | 0.175           | -0.144          | 0.078           | 0.222           |                 |                 |                 | -0.182          | 0.035           | 0.217           | -0.530          | -0.010          | 0.521           | -0.481          | -0.058          | 0.424           | 0.8000 |
| 0.9000                   | -0.145                   | 0.006           | 0.151           | -0.149          | 0.018           | 0.167           | -0.168          | 0.041           | 0.210           |                 |                 |                 | -0.180          | 0.002           | 0.183           | -0.501          | -0.090          | 0.410           | -0.472          | -0.147          | 0.325           | 0.9000 |
| 1.0000                   | -0.156                   | -0.024          | 0.132           | -0.166          | -0.008          | 0.158           | -0.152          | -0.001          | 0.151           |                 |                 |                 | 0.053           | -0.029          | -0.082          | -0.394          | -0.200          | 0.195           | -0.466          | -0.272          | 0.194           | 1.0000 |
| M = 0.701      α = 15.76 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.524                   | 0.190           | 1.714           | -1.950          | 0.208           | 2.093           | -1.708          | -0.170          | 1.538           | -1.412          | -0.258          | 1.154           | -0.771          | -0.216          | 0.555           | -0.473          | -0.019          |                 |                 |                 | 0.0000          |        |
| 0.0125                   | -2.035                   | 0.370           | 2.405           | -1.822          | 0.342           | 2.109           | -1.663          | 0.102           | 1.765           | -1.531          | -0.002          | 1.529           | -1.421          | 0.027           | 1.448           | -0.753          | 0.002           | 0.755           | -0.481          |                 | 0.0125          |        |
| 0.0250                   | -2.291                   | 0.477           | 2.768           | -1.767          | 0.342           | 2.109           | -1.647          | 0.277           | 1.924           | -1.519          | 0.235           | 1.754           | -1.426          | 0.215           | 1.641           |                 | 0.152           |                 | -0.489          |                 | 0.0250          |        |
| 0.0420                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -2.033                   | 0.473           | 2.506           | -1.873          | 0.387           | 2.260           | -1.708          | 0.334           | 2.042           |                 | 0.322           |                 | -1.421          | 0.300           | 1.721           | -0.714          | 0.249           | 0.964           | -0.507          |                 | 0.0500          |        |
| 0.0640                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -1.154                   | 0.443           | 1.597           | -1.837          | 0.385           | 2.221           | -1.723          | 0.343           | 2.066           | -1.679          |                 |                 | -1.467          | 0.329           | 1.797           | -0.703          | 0.286           | 0.989           | -0.520          |                 | 0.0750          |        |
| 0.0810                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.875                   | 0.415           | 1.290           | -2.040          | 0.370           | 2.411           | -1.721          | 0.351           | 2.072           | -1.626          | 0.335           | 1.961           | -1.537          | 0.333           | 1.870           | -0.682          | 0.290           | 0.972           | -0.534          | 0.194           | 0.728           | 0.1000 |
| 0.1500                   | -0.732                   | 0.368           | 1.100           | -1.280          | 0.346           | 1.626           | -2.066          | 0.334           | 2.340           | -1.541          | 0.318           | 1.860           | -1.472          | 0.319           | 1.791           | -0.671          | 0.286           | 0.956           | -0.554          | 0.194           | 0.688           | 0.1500 |
| 0.2000                   | -0.608                   | 0.326           | 0.934           | -0.803          | 0.328           | 1.131           | -1.534          | 0.321           | 1.856           | -1.833          |                 |                 | -1.417          | 0.302           | 1.719           | -0.657          | 0.268           | 0.925           | -0.574          | 0.188           | 0.762           | 0.2000 |
| 0.3000                   | -0.531                   | 0.270           | 0.801           | -0.523          | 0.282           | 0.805           | -0.695          | 0.274           | 0.969           |                 |                 |                 | -0.868          | 0.238           | 1.106           | -0.574          | 0.188           | 0.763           | -0.623          | 0.124           | 0.747           | 0.3000 |
| 0.4000                   | -0.407                   | 0.225           | 0.632           | -0.381          | 0.242           | 0.623           | -0.386          | 0.236           | 0.623           |                 |                 |                 | -0.539          | 0.197           | 0.736           | -0.619          | 0.156           | 0.775           | -0.625          | 0.086           | 0.711           | 0.4000 |
| 0.5000                   | -0.269                   | 0.194           | 0.463           | -0.262          | 0.200           | 0.461           | -0.296          | 0.197           | 0.493           |                 |                 |                 | -0.516          | 0.145           | 0.661           | -0.629          | 0.108           | 0.738           | -0.625          | 0.034           | 0.659           | 0.5000 |
| 0.6000                   |                          | 0.155           |                 | -0.280          | 0.158           | 0.437           | -0.277          | 0.176           | 0.455           |                 |                 |                 | -0.370          | 0.099           | 0.469           | -0.639          | 0.059           | 0.698           | -0.629          | -0.016          | 0.613           | 0.7000 |
| 0.7000                   | -0.287                   |                 |                 | -0.319          | 0.113           | 0.432           | -0.336          | 0.119           | 0.455           |                 |                 |                 | -0.240          | 0.063           | 0.303           | -0.644          | -0.008          | 0.636           | -0.639          | -0.082          | 0.557           | 0.8000 |
| 0.8000                   | -0.279                   | 0.055           | 0.334           | -0.293          | 0.064           | 0.357           | -0.302          | 0.074           | 0.377           |                 |                 |                 | -0.230          | -0.006          | 0.224           | -0.635          | -0.118          | 0.518           | -0.654          | -0.193          | 0.461           | 0.9000 |
| 0.9000                   | -0.266                   | -0.003          | 0.264           | -0.274          | 0.012           | 0.287           | -0.276          | 0.042           | 0.318           |                 |                 |                 | -0.341          | -0.107          | 0.234           | -0.612          | -0.269          | 0.344           | -0.673          | -0.348          | 0.325           | 1.0000 |
| 1.0000                   | -0.248                   | -0.065          | 0.183           | -0.262          | -0.042          | 0.220           | -0.257          | 0.022           | 0.279           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $0^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.904      α = 03.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.284          | 0.220           | 0.504           | -0.370          | 0.202           | 0.572           | -0.474          | 0.162           | 0.636           | -0.632          | 0.194           | 0.827           | -0.675          | 0.163           | 0.837           | -0.540          | 0.147           |                 |                 |                 |                 | 0.0000 |
| 0.0125                   | -0.282          | 0.171           | 0.454           | -0.468          | 0.149           | 0.617           | -0.570          | 0.143           | 0.714           | -0.683          | 0.148           | 0.831           | -0.669          | 0.147           | 0.816           | -0.543          |                 |                 |                 |                 | 0.0125          |        |
| 0.0250                   | -0.276          | 0.132           | 0.408           | -0.482          | 0.109           | 0.592           | -0.574          | 0.123           | 0.696           | -0.706          | 0.105           | 0.810           | -0.669          | 0.111           | 0.781           | -0.546          |                 |                 |                 |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.249          | 0.080           | 0.329           | -0.260          | 0.067           | 0.327           | -0.305          | 0.075           | 0.379           |                 | 0.060           |                 | -0.557          | 0.077           | 0.635           | -0.681          | 0.088           | 0.769           | -0.548          | 0.127           | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.211          | 0.053           | 0.265           | -0.239          | 0.043           | 0.282           | -0.286          | 0.038           | 0.325           | -0.321          |                 |                 | -0.477          | 0.050           | 0.527           | -0.692          | 0.061           | 0.752           | -0.550          | 0.112           | 0.0750          |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.204          | 0.038           | 0.242           | -0.253          | 0.023           | 0.277           | -0.273          | 0.024           | 0.297           | -0.311          | 0.021           | 0.332           | -0.373          | 0.033           | 0.406           | -0.698          | 0.042           | 0.740           | -0.552          | 0.088           | 0.640           | 0.1000 |
| 0.1500                   | -0.227          | 0.018           | 0.245           | -0.234          | 0.005           | 0.239           | -0.271          | 0.002           | 0.273           | -0.272          | -0.003          | 0.269           | -0.316          | 0.013           | 0.329           | -0.702          | 0.018           | 0.720           | -0.556          | 0.069           | 0.624           | 0.1500 |
| 0.2000                   | -0.201          | 0.001           | 0.202           | -0.237          | -0.003          | 0.234           | -0.248          | -0.002          | 0.246           | -0.285          |                 |                 | -0.299          | -0.004          | 0.296           | -0.660          | 0.005           | 0.665           | -0.559          | 0.049           | 0.608           | 0.2000 |
| 0.3000                   | -0.240          | -0.027          | 0.213           | -0.248          | -0.026          | 0.223           | -0.255          | -0.026          | 0.229           |                 |                 |                 | -0.279          | -0.017          | 0.262           | -0.397          | -0.017          | 0.380           | -0.578          | 0.019           | 0.597           | 0.3000 |
| 0.4000                   | -0.240          | -0.046          | 0.194           | -0.245          | -0.040          | 0.202           | -0.256          | -0.043          | 0.214           |                 |                 |                 | -0.271          | -0.031          | 0.240           | -0.102          | -0.028          | 0.074           | -0.618          | 0.003           | 0.620           | 0.4000 |
| 0.5000                   | -0.245          | -0.050          | 0.195           | -0.240          | -0.055          | 0.185           | -0.244          | -0.048          | 0.196           |                 |                 |                 | -0.247          | -0.042          | 0.205           | -0.120          | -0.023          | 0.097           | -0.640          | -0.004          | 0.636           | 0.5000 |
| 0.6000                   | -0.058          |                 |                 | -0.211          | -0.059          | 0.152           | -0.217          | -0.056          | 0.161           |                 |                 |                 | -0.137          | -0.048          | 0.089           | -0.173          | -0.036          | 0.136           | -0.621          | -0.009          | 0.612           | 0.6000 |
| 0.7000                   | -0.173          |                 |                 | -0.172          | -0.058          | 0.114           | -0.175          | -0.055          | 0.120           |                 |                 |                 | -0.221          | -0.052          | 0.169           | -0.199          | -0.038          | 0.161           | -0.571          | -0.011          | 0.560           | 0.7000 |
| 0.8000                   | -0.221          | -0.059          | 0.162           | -0.232          | -0.055          | 0.177           | -0.247          | -0.053          | 0.194           |                 |                 |                 | -0.288          | -0.050          | 0.239           | -0.157          | -0.034          | 0.123           | -0.459          | -0.017          | 0.443           | 0.8000 |
| 0.9000                   | -0.193          | -0.041          | 0.152           | -0.190          | -0.032          | 0.158           | -0.194          | -0.036          | 0.158           |                 |                 |                 | -0.162          | -0.025          | 0.137           | -0.067          | -0.018          | 0.048           | -0.313          | -0.012          | 0.301           | 0.9000 |
| 1.0000                   | -0.089          | -0.010          | 0.079           | -0.046          | 0.011           | 0.057           | -0.018          | -0.004          | 0.014           |                 |                 |                 | 0.158           | 0.022           | -0.136          | 0.072           | 0.009           | -0.064          | -0.132          | 0.001           | 0.133           | 1.0000 |
| M = 0.951      α = 03.87 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.219          | 0.241           | 0.460           | -0.380          | 0.210           | 0.590           | -0.414          | 0.202           | 0.616           | -0.613          | 0.158           | 0.771           | -0.666          | 0.157           | 0.823           | -0.623          | 0.118           |                 |                 |                 |                 | 0.0000 |
| 0.0125                   | -0.241          | 0.190           | 0.431           | -0.436          | 0.159           | 0.595           | -0.529          | 0.154           | 0.683           | -0.634          | 0.155           | 0.790           | -0.660          | 0.140           | 0.780           | -0.665          | 0.134           | 0.799           | -0.627          |                 |                 | 0.0125 |
| 0.0250                   | -0.250          | 0.148           | 0.398           | -0.432          | 0.120           | 0.552           | -0.542          | 0.116           | 0.658           | -0.672          | 0.109           | 0.781           | -0.639          | 0.120           | 0.759           |                 | 0.112           |                 | -0.628          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.229          | 0.093           | 0.323           | -0.245          | 0.075           | 0.320           | -0.264          | 0.070           | 0.333           |                 | 0.060           |                 | -0.553          | 0.072           | 0.625           | -0.672          | 0.074           | 0.746           | -0.626          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.197          | 0.064           | 0.261           | -0.227          | 0.051           | 0.278           | -0.271          | 0.044           | 0.316           | -0.305          |                 |                 | -0.373          | 0.051           | 0.424           | -0.686          | 0.043           | 0.729           | -0.625          | 0.081           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.191          | 0.046           | 0.237           | -0.215          | 0.030           | 0.245           | -0.281          | 0.028           | 0.309           | -0.297          | -0.017          | 0.314           | -0.326          | 0.024           | 0.350           | -0.690          | 0.022           | 0.713           | -0.623          | 0.055           | 0.678           | 0.1000 |
| 0.1500                   | -0.197          | 0.025           | 0.222           | -0.229          | 0.007           | 0.237           | -0.264          | 0.006           | 0.270           | -0.278          | -0.005          | 0.273           | -0.297          | 0.005           | 0.302           | -0.690          | -0.002          | 0.688           | -0.621          | 0.036           | 0.657           | 0.1500 |
| 0.2000                   | -0.194          | 0.004           | 0.198           | -0.230          | -0.005          | 0.226           | -0.245          | -0.004          | 0.240           | -0.278          |                 |                 | -0.292          | -0.013          | 0.278           | -0.648          | -0.018          | 0.630           | -0.623          | 0.016           | 0.639           | 0.2000 |
| 0.3000                   | -0.232          | -0.028          | 0.204           | -0.249          | -0.030          | 0.219           | -0.257          | -0.033          | 0.225           |                 |                 |                 | -0.287          | -0.025          | 0.262           | -0.432          | -0.043          | 0.389           | -0.636          | -0.013          | 0.623           | 0.3000 |
| 0.4000                   | -0.247          | -0.053          | 0.194           | -0.256          | -0.050          | 0.206           | -0.263          | -0.050          | 0.213           |                 |                 |                 | -0.283          | -0.044          | 0.239           | -0.249          | -0.058          | 0.191           | -0.687          | -0.033          | 0.654           | 0.4000 |
| 0.5000                   | -0.258          | -0.062          | 0.195           | -0.259          | -0.071          | 0.188           | -0.266          | -0.070          | 0.196           |                 |                 |                 | -0.282          | -0.065          | 0.218           | -0.160          | -0.056          | 0.104           | -0.728          | -0.037          | 0.691           | 0.5000 |
| 0.6000                   | -0.260          | -0.077          |                 | -0.264          | -0.082          | 0.182           | -0.273          | -0.079          | 0.194           |                 |                 |                 | -0.245          | -0.072          | 0.173           | -0.184          | -0.071          | 0.113           | -0.756          | -0.038          | 0.718           | 0.6000 |
| 0.7000                   | -0.260          | -0.091          |                 | -0.255          | -0.086          | 0.169           | -0.230          | -0.081          | 0.149           |                 |                 |                 | -0.251          | -0.083          | 0.167           | -0.220          | -0.072          | 0.148           | -0.752          | -0.031          | 0.721           | 0.7000 |
| 0.8000                   | -0.243          | -0.091          | 0.152           | -0.252          | -0.089          | 0.163           | -0.275          | -0.087          | 0.189           |                 |                 |                 | -0.326          | -0.084          | 0.242           | -0.272          | -0.065          | 0.208           | -0.643          | -0.028          | 0.615           | 0.8000 |
| 0.9000                   | -0.293          | -0.070          | 0.223           | -0.304          | -0.062          | 0.242           | -0.318          | -0.067          | 0.251           |                 |                 |                 | -0.363          | -0.055          | 0.308           | -0.235          | -0.038          | 0.197           | -0.412          | -0.009          | 0.403           | 0.9000 |
| 1.0000                   | -0.410          | -0.029          | 0.381           | -0.411          | -0.007          | 0.405           | -0.359          | -0.023          | 0.336           |                 |                 |                 | -0.360          | 0.004           | 0.364           | -0.108          | 0.009           | 0.117           | -0.059          | 0.023           | 0.083           | 1.0000 |
| M = 1.011      α = 03.98 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.158          | 0.264           | 0.422           | -0.313          | 0.241           | 0.554           | -0.366          | 0.250           | 0.616           | -0.529          | 0.180           | 0.710           | -0.566          | 0.216           | 0.782           | -0.568          | 0.136           |                 |                 |                 |                 | 0.0000 |
| 0.0125                   | -0.192          | 0.213           | 0.406           | -0.380          | 0.191           | 0.572           | -0.462          | 0.192           | 0.654           | -0.552          | 0.195           | 0.747           | -0.564          | 0.193           | 0.757           | -0.570          |                 |                 |                 |                 | 0.0125          |        |
| 0.0250                   | -0.209          | 0.173           | 0.382           | -0.380          | 0.154           | 0.534           | -0.469          | 0.150           | 0.619           | -0.576          | 0.152           | 0.728           | -0.553          | 0.195           | 0.748           |                 | 0.172           |                 | -0.571          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.188          | 0.124           | 0.312           | -0.181          | 0.116           | 0.297           | -0.213          | 0.115           | 0.328           |                 | 0.112           |                 | -0.485          | 0.153           | 0.638           | -0.568          | 0.133           | 0.701           | -0.571          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.159          | 0.098           | 0.258           | -0.171          | 0.094           | 0.265           | -0.213          | 0.092           | 0.304           | -0.241          |                 |                 | -0.298          | 0.117           | 0.415           | -0.581          | 0.103           | 0.684           | -0.572          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.142          | 0.084           | 0.226           | -0.159          | 0.074           | 0.233           | -0.211          | 0.074           | 0.285           | -0.222          | 0.073           | 0.294           | -0.249          | 0.089           | 0.338           | -0.590          | 0.081           | 0.671           | -0.571          | 0.085           | 0.645           | 0.1000 |
| 0.1500                   | -0.137          | 0.069           | 0.207           | -0.174          | 0.056           | 0.231           | -0.193          | 0.055           | 0.247           | -0.208          | 0.053           | 0.261           | -0.217          | 0.058           | 0.276           | -0.592          | 0.055           | 0.646           | -0.569          | 0.056           | 0.625           | 0.1500 |
| 0.2000                   | -0.149          | 0.056           | 0.205           | -0.160          | 0.051           | 0.211           | -0.179          | 0.055           | 0.234           | -0.196          |                 |                 | -0.211          | 0.045           | 0.256           | -0.557          | 0.036           | 0.593           | -0.570          | 0.034           | 0.604           | 0.2000 |
| 0.3000                   | -0.161          | 0.033           | 0.194           | -0.176          | 0.031           | 0.207           | -0.185          | 0.028           | 0.213           |                 |                 |                 | -0.207          | 0.038           | 0.246           | -0.365          | 0.004           | 0.368           | -0.582          | 0.003           | 0.586           | 0.3000 |
| 0.4000                   | -0.173          | 0.012           | 0.185           | -0.179          | 0.016           | 0.195           | -0.189          | 0.015           | 0.203           |                 |                 |                 | -0.202          | 0.013           | 0.216           | -0.200          | -0.021          | 0.178           | -0.622          | -0.025          | 0.597           | 0.4000 |
| 0.5000                   | -0.179          | 0.004           | 0.184           | -0.178          | -0.006          | 0.172           | -0.185          | -0.001          | 0.184           |                 |                 |                 | -0.210          | -0.013          | 0.198           | -0.127          | -0.026          | 0.101           | -0.654          | -0.040          | 0.614           | 0.5000 |
| 0.6000                   |                 | -0.023          |                 | -0.191          | -0.030          | 0.160           | -0.200          | -0.031          | 0.169           |                 |                 |                 | -0.203          | -0.033          | 0.171           | -0.156          | -0.043          | 0.113           | -0.677          | -0.052          | 0.625           | 0.6000 |
| 0.7000                   | -0.203          |                 |                 | -0.210          | -0.047          | 0.163           | -0.197          | -0.048          | 0.149           |                 |                 |                 | -0.207          | -0.050          | 0.157           | -0.194          | -0.067          | 0.126           | -0.684          | -0.056          | 0.628           | 0.7000 |
| 0.8000                   | -0.201          | -0.073          | 0.129           | -0.212          | -0.072          | 0.140           | -0.234          | -0.064          | 0.169           |                 |                 |                 | -0.303          | -0.068          | 0.235           | -0.248          | -0.087          | 0.161           | -0.628          | -0.070          | 0.557           | 0.8000 |
| 0.9000                   | -0.270          | -0.089          | 0.181           | -0.279          | -0.084          | 0.195           | -0.304          | -0.087          | 0.217           |                 |                 |                 | -0.348          | -0.078          | 0.270           | -0.246          | -0.091          | 0.155           | -0.519          | -0.065          | 0.454           | 0.900  |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $0^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.049      α = 03.98  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.131          | 0.297           | 0.428           | -0.309          | 0.257           | 0.566           | -0.366          | 0.233           | 0.599           | -0.515          | 0.218           | 0.733           | -0.547          | 0.213           | 0.761           | -0.547          | 0.130           | 0.0000          |                 |                 |                 |        |
| 0.0125                    | -0.162          | 0.243           | 0.405           | -0.368          | 0.205           | 0.574           | -0.454          | 0.199           | 0.653           | -0.545          | 0.197           | 0.741           | -0.530          | 0.186           | 0.717           | -0.545          | 0.185           | 0.731           | -0.551          |                 |                 |        |
| 0.0250                    | -0.180          | 0.199           | 0.379           | -0.365          | 0.165           | 0.531           | -0.459          | 0.169           | 0.628           | -0.570          | 0.149           | 0.719           | -0.534          | 0.164           | 0.697           | -0.553          | 0.161           |                 | -0.553          | 0.125           | 0.0420          |        |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |                 |        |
| 0.0500                    | -0.176          | 0.144           | 0.320           | -0.175          | 0.121           | 0.296           | -0.215          | 0.125           | 0.340           | -0.505          | 0.145           | 0.650           | -0.551          | 0.122           | 0.673           | -0.553          |                 | 0.125           |                 |                 | 0.0500          |        |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |                 |        |
| 0.0750                    | -0.151          | 0.113           | 0.264           | -0.166          | 0.099           | 0.265           | -0.197          | 0.085           | 0.282           | -0.238          | -0.303          | 0.089           | 0.393           | -0.565          | 0.095           | 0.660           | -0.555          | 0.111           |                 |                 | 0.0750          |        |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |                 |        |
| 0.1000                    | -0.137          | 0.093           | 0.230           | -0.168          | 0.077           | 0.245           | -0.207          | 0.068           | 0.274           | -0.229          | 0.061           | 0.291           | -0.256          | 0.056           | 0.312           | -0.561          | 0.073           | 0.634           | -0.555          | 0.084           | 0.639           |        |
| 0.1500                    | -0.128          | 0.073           | 0.201           | -0.172          | 0.051           | 0.223           | -0.184          | 0.044           | 0.227           | -0.209          | 0.032           | 0.241           | -0.228          | 0.038           | 0.266           | -0.534          | 0.047           | 0.581           | -0.551          | 0.069           | 0.620           |        |
| 0.2000                    | -0.150          | 0.049           | 0.200           | -0.151          | 0.042           | 0.193           | -0.182          | 0.035           | 0.217           | -0.193          | -0.219          | 0.025           | 0.244           | -0.481          | 0.031           | 0.512           | -0.552          | 0.049           | 0.601           | 0.2000          |                 |        |
| 0.3000                    | -0.154          | 0.011           | 0.165           | -0.172          | 0.008           | 0.181           | -0.187          | 0.012           | 0.199           | -0.207          | 0.011           | 0.218           | -0.321          | 0.003           | 0.324           | -0.558          | 0.025           | 0.583           | 0.3000          |                 |                 |        |
| 0.4000                    | -0.170          | -0.013          | 0.157           | -0.177          | -0.008          | 0.169           | -0.186          | -0.006          | 0.181           | -0.202          | 0.007           | 0.209           | -0.217          | -0.015          | 0.202           | -0.588          | 0.006           | 0.594           | 0.4000          |                 |                 |        |
| 0.5000                    | -0.180          | -0.008          | 0.172           | -0.176          | -0.010          | 0.166           | -0.185          | -0.011          | 0.174           | -0.207          | -0.015          | 0.192           | -0.132          | -0.018          | 0.114           | -0.605          | -0.008          | 0.597           | 0.5000          |                 |                 |        |
| 0.6000                    |                 | -0.024          |                 | -0.187          | -0.031          | 0.157           | -0.195          | -0.033          | 0.163           | -0.205          | -0.030          | 0.176           | -0.142          | -0.028          | 0.114           | -0.613          | -0.017          | 0.596           | 0.6000          |                 |                 |        |
| 0.7000                    | -0.191          |                 |                 | -0.199          | -0.040          | 0.159           | -0.195          | -0.039          | 0.156           | -0.191          | -0.044          | 0.148           | -0.170          | -0.043          | 0.127           | -0.604          | -0.016          | 0.587           | 0.7000          |                 |                 |        |
| 0.8000                    | -0.183          | -0.057          | 0.125           | -0.188          | -0.053          | 0.135           | -0.215          | -0.050          | 0.164           | -0.259          | -0.052          | 0.207           | -0.211          | -0.051          | 0.160           | -0.526          | -0.022          | 0.504           | 0.8000          |                 |                 |        |
| 0.9000                    | -0.238          | -0.058          | 0.180           | -0.247          | -0.052          | 0.195           | -0.275          | -0.056          | 0.219           | -0.310          | -0.049          | 0.261           | -0.199          | -0.041          | 0.159           | -0.385          | -0.014          | 0.370           | 0.9000          |                 |                 |        |
| 1.0000                    | -0.358          | -0.049          | 0.309           | -0.378          | -0.037          | 0.340           | -0.377          | -0.055          | 0.322           | -0.345          | -0.035          | 0.310           | -0.135          | -0.012          | 0.123           | -0.181          | 0.007           | 0.187           | 1.0000          |                 |                 |        |
| M = 1.103      α = 03.98  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.138          | 0.269           | 0.407           | -0.279          | 0.248           | 0.527           | -0.267          | 0.274           | 0.541           | -0.353          | 0.279           | 0.632           | -0.508          | 0.253           | 0.761           | -0.522          | 0.192           | 0.0000          |                 |                 |                 |        |
| 0.0125                    | -0.147          | 0.221           | 0.367           | -0.293          | 0.201           | 0.495           | -0.346          | 0.232           | 0.578           | -0.395          | 0.261           | 0.657           | -0.401          | 0.274           | 0.675           | -0.504          | 0.227           | 0.731           | -0.521          |                 |                 |        |
| 0.0250                    | -0.151          | 0.182           | 0.333           | -0.273          | 0.166           | 0.439           | -0.349          | 0.199           | 0.548           | -0.394          | 0.221           | 0.616           | -0.405          | 0.262           | 0.666           | -0.504          | 0.204           |                 | -0.521          | 0.172           | 0.0420          |        |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |                 |        |
| 0.0500                    | -0.149          | 0.134           | 0.283           | -0.125          | 0.133           | 0.258           | -0.126          | 0.164           | 0.290           | -0.281          | 0.213           | 0.494           | -0.509          | 0.165           | 0.674           | -0.523          |                 | 0.156           |                 | 0.0500          |                 |        |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |                 |        |
| 0.0750                    | -0.119          | 0.109           | 0.228           | -0.102          | 0.130           | 0.232           | -0.118          | 0.156           | 0.274           | -0.136          | -0.167          | 0.183           | 0.350           | -0.524          | 0.137           | 0.661           | -0.527          |                 | 0.141           | 0.639           | 0.0750          |        |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |                 |        |
| 0.1000                    | -0.094          | 0.103           | 0.197           | -0.092          | 0.120           | 0.212           | -0.105          | 0.145           | 0.250           | -0.128          | 0.154           | 0.283           | -0.159          | 0.171           | 0.330           | -0.515          | 0.119           | 0.635           | -0.527          | 0.130           | 0.658           |        |
| 0.1500                    | -0.059          | 0.113           | 0.172           | -0.082          | 0.122           | 0.205           | -0.086          | 0.141           | 0.227           | -0.115          | 0.136           | 0.251           | -0.146          | 0.139           | 0.284           | -0.478          | 0.094           | 0.672           | -0.525          | 0.111           | 0.636           |        |
| 0.2000                    | -0.076          | 0.117           | 0.193           | -0.057          | 0.137           | 0.194           | -0.083          | 0.137           | 0.221           | -0.112          | -0.137          | 0.122           | 0.259           | -0.413          | 0.081           | 0.493           | -0.525          | 0.089           | 0.614           | 0.2000          |                 |        |
| 0.3000                    | -0.056          | 0.121           | 0.176           | -0.082          | 0.115           | 0.197           | -0.105          | 0.113           | 0.217           | -0.136          | 0.088           | 0.225           | -0.236          | 0.057           | 0.293           | -0.533          | 0.059           | 0.592           | 0.3000          |                 |                 |        |
| 0.4000                    | -0.094          | 0.081           | 0.175           | -0.111          | 0.075           | 0.186           | -0.128          | 0.068           | 0.196           | -0.154          | 0.060           | 0.214           | -0.175          | 0.042           | 0.217           | -0.556          | 0.036           | 0.592           | 0.4000          |                 |                 |        |
| 0.5000                    | -0.134          | 0.049           | 0.182           | -0.135          | 0.038           | 0.173           | -0.148          | 0.037           | 0.186           | -0.172          | 0.038           | 0.211           | -0.100          | 0.041           | 0.141           | -0.567          | 0.020           | 0.587           | 0.5000          |                 |                 |        |
| 0.6000                    |                 | 0.027           |                 | -0.158          | 0.025           | 0.183           | -0.170          | 0.033           | 0.204           | -0.170          | 0.032           | 0.202           | -0.102          | 0.017           | 0.119           | -0.569          | 0.007           | 0.576           | 0.6000          |                 |                 |        |
| 0.7000                    | -0.162          |                 |                 | -0.170          | 0.017           | 0.186           | -0.169          | 0.019           | 0.188           | -0.150          | 0.013           | 0.163           | -0.126          | -0.008          | 0.118           | -0.552          | 0.004           | 0.556           | 0.7000          |                 |                 |        |
| 0.8000                    | -0.152          | -0.011          | 0.142           | -0.150          | -0.009          | 0.141           | -0.171          | -0.005          | 0.166           | -0.214          | -0.004          | 0.210           | -0.165          | -0.028          | 0.137           | -0.469          | -0.003          | 0.465           | 0.8000          |                 |                 |        |
| 0.9000                    | -0.191          | -0.036          | 0.155           | -0.201          | -0.032          | 0.169           | -0.212          | -0.031          | 0.181           | -0.250          | -0.024          | 0.226           | -0.164          | -0.042          | 0.122           | -0.310          | 0.002           | 0.312           | 0.9000          |                 |                 |        |
| 1.0000                    | -0.278          | -0.065          | 0.213           | -0.322          | -0.051          | 0.271           | -0.291          | -0.057          | 0.234           | -0.258          | -0.046          | 0.212           | -0.122          | -0.050          | 0.072           | -0.074          | 0.022           | 0.095           | 1.0000          |                 |                 |        |
| M = 1.302      α = -04.18 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.319           | -0.186          | -0.505          | 0.225           | -0.240          | -0.465          | 0.217           | -0.275          | -0.492          | 0.253           | -0.345          | -0.598          | 0.238           | -0.417          | -0.656          | 0.237           | -0.494          | 0.0000          |                 |                 |                 |        |
| 0.0125                    | 0.214           | -0.146          | -0.359          | 0.170           | -0.224          | -0.395          | 0.173           | -0.284          | -0.457          | 0.181           | -0.316          | -0.498          | 0.194           | -0.343          | -0.537          | 0.202           | -0.414          | -0.615          | 0.196           |                 | 0.0125          |        |
| 0.0250                    | 0.142           | -0.118          | -0.260          | 0.132           | -0.206          | -0.339          | 0.140           | -0.280          | -0.420          | 0.152           | -0.304          | -0.456          | 0.151           | -0.341          | -0.492          |                 | -0.412          |                 | 0.165           |                 | 0.0250          |        |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |                 |        |
| 0.0500                    | 0.096           | -0.101          | -0.198          | 0.109           | -0.164          | -0.273          | 0.107           | -0.237          | -0.344          | -0.282          | 0.109           | -0.336          | -0.446          | 0.124           | -0.415          | -0.539          | 0.129           | -0.464          | 0.0500          |                 | 0.0500          |        |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |                 |        |
| 0.0750                    | 0.087           | -0.101          | -0.188          | 0.082           | -0.123          | -0.205          | 0.092           | -0.158          | -0.251          | 0.083           | -0.196          | -0.294          | 0.097           | -0.420          | -0.517          | 0.110           | -0.461          | 0.0750          |                 | 0.0750          |                 |        |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |                 |        |
| 0.1000                    | 0.071           | -0.096          | -0.167          | 0.063           | -0.119          | -0.182          | 0.073           | -0.125          | -0.198          | 0.067           | -0.152          | -0.218          | 0.077           | -0.141          | -0.218          | 0.081           | -0.408          | -0.489          | 0.097           | -0.466          | -0.562          | 0.1000 |
| 0.1500                    | 0.057           | -0.095          | -0.152          | 0.043           | -0.099          | -0.142          | 0.058           | -0.129          | -0.188          | 0.052           | -0.120          | -0.171          | 0.064           | -0.128          | -0.192          | 0.061           | -0.315          | -0.376          | 0.079           | -0.472          | -0.551          | 0.1500 |
| 0.2000                    | 0.034           | -0.089          | -0.122          | 0.060           | -0.095          | -0.155          | 0.053           | -0.084          | -0.137          | 0.050           | 0.060           | -0.143          | -0.203          | 0.052           | -0.263          | -0.314          | 0.070           | -0.473          | -0.543          | 0.2000          |                 |        |
| 0.3000                    | 0.043           | -0.095          | -0.138          | 0.039           | -0.091          | -0.130          | 0.047           | -0.113          | -0.160          | 0.045           | -0.134          | -0.178          | 0.042           | -0.204          | -0.247          | 0.077           | -0.446          | -0.523          | 0.3000          |                 | 0.3000          |        |
| 0.4000                    | 0.039           | -0.108          | -0.147          | 0.030           | -0.112          | -0.143          | 0.026           | -0.115          | -0.142          | 0.024           | -0.133          | -0.157          | 0.035           | -0.191          | -0.226          | 0.066           | -0.418          | -0.484          | 0.4000          |                 | 0.4000          |        |
| 0.5000                    | 0.016           | -0.114          | -0.131          | 0.015           | -0.125          | -0.140          | 0.016           | -0.123          | -0.140          | 0.023           | -0.130          | -0.153          | 0.080           | -0.174          | -0.254          | 0.048           | -0.386          | -0.434          | 0.5000          |                 | 0.5000          |        |
| 0.6000                    |                 | -0.125          |                 | 0.011           | -0.127          | -0.139          | 0.011           | -0.134          | -0.145          | 0.013           | -0.144          | -0.158          | 0.039           | -0.180          | -0.219          | 0.031           | -0.347          | -0.378          | 0.6000          |                 | 0.6000          |        |
| 0.7000                    | 0.008           |                 |                 | -0.136          | -0.136          | 0.007           | -0.130          | -0.137          |                 | 0.083           | -0.142          | -0.225          | 0.012           | -0.181          | -0.194          | 0.020           | -0.296          | -0.315          | 0.7000          |                 | 0.7000          |        |
| 0.8000                    | -0.008          | -0.147          | -0.139          | 0.018           | -0.146          | -0.165          | 0.027           | -0.143          | -0.170          | 0.039           | -0.138          | -0.177          | 0.019           | -0.174          | -0.155          | 0.006           | -0.244          | -0.250          | 0.8000          |                 | 0.8000          |        |
| 0.9000                    | 0.022           | -0.119          | -0.141          | 0.024           | -0.124          | -0.148          | 0.016           | -0.135          | -0.151          | -0.003          | -0.139          | -0.136          | -0.026          | -0.170          | -0.144          | -0.007          | -0.182          | -0.175          | 0.9000          |                 | 0.9000          |        |
| 1.0000                    | 0.098           | -0.065          | -0.163          | 0.016           | -0.069          | -0.085          | -0.025          | -0.108          | -0.083          | -0.042          | -0.144          | -0.102          | -0.008          | -0.170          | -0.162          | -0.0.           |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $0^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.302      α = -00.15 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.151           | 0.099           | -0.052          | 0.050           | 0.068           | 0.018           | 0.015           | 0.023           | 0.008           |                 |                 |                 | 0.003           | -0.060          | -0.063          | -0.007          | 0.037           | 0.044           | -0.055          | -0.077          |                 | 0.0000 |
| 0.0125                    | 0.085           | 0.074           | -0.011          | 0.019           | 0.038           | 0.019           | 0.013           | 0.008           | -0.005          | -0.002          | 0.015           | 0.017           | 0.001           | -0.021          | -0.022          | -0.019          | 0.002           | 0.020           | -0.066          |                 |                 | 0.0125 |
| 0.0250                    | 0.037           | 0.053           | 0.016           | -0.002          | 0.015           | 0.017           | 0.007           | -0.004          | -0.011          | -0.017          | -0.001          | 0.016           | -0.005          | -0.001          | 0.003           | -0.024          |                 |                 | -0.076          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.003          | 0.022           | 0.025           | -0.008          | -0.007          | 0.002           | -0.015          | -0.018          | -0.004          |                 |                 |                 | -0.017          |                 |                 | -0.049          | -0.048          | 0.002           | -0.094          | -0.076          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.004          | -0.003          | 0.001           | -0.018          | -0.013          | 0.005           | -0.027          | -0.023          | 0.004           | -0.032          |                 |                 | -0.034          | -0.029          | 0.005           | -0.065          | -0.052          | 0.013           | -0.098          | -0.077          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.010          | -0.007          | 0.003           | -0.022          | -0.020          | 0.002           | -0.031          | -0.018          | 0.013           | -0.038          | -0.040          | -0.002          | -0.047          | -0.024          | 0.022           | -0.072          | -0.056          | 0.016           | -0.099          | -0.079          | 0.020           | 0.1000 |
| 0.1500                    | -0.022          | -0.013          | 0.009           | -0.032          | -0.022          | 0.010           | -0.032          | -0.032          | 0.000           | -0.040          | -0.035          | 0.005           | -0.048          | -0.021          | 0.027           | -0.076          | -0.061          | 0.014           | -0.099          | -0.082          | 0.018           | 0.1500 |
| 0.2000                    | -0.033          | -0.023          | 0.010           | -0.020          | -0.017          | 0.003           | -0.029          | -0.012          | 0.017           | -0.048          |                 |                 | -0.038          | -0.037          | 0.001           | -0.079          | -0.055          | 0.024           | -0.099          | -0.089          | 0.010           | 0.2000 |
| 0.3000                    | -0.022          | -0.023          | -0.001          | -0.033          | -0.014          | 0.019           | -0.033          | -0.028          | 0.005           |                 |                 |                 | -0.051          | -0.037          | 0.014           | -0.069          | -0.070          | -0.001          | -0.088          | -0.095          | -0.007          | 0.3000 |
| 0.4000                    | -0.030          | -0.032          | -0.001          | -0.032          | -0.032          |                 | -0.042          | -0.034          | 0.008           |                 |                 |                 | -0.052          | -0.050          | 0.002           | -0.050          | -0.073          | -0.023          | -0.091          | -0.097          | -0.007          | 0.4000 |
| 0.5000                    | -0.046          | -0.038          | 0.008           | -0.043          | -0.049          | -0.006          | -0.048          | -0.052          | -0.004          |                 |                 |                 | -0.063          | -0.050          | 0.013           | -0.034          | -0.067          | -0.033          | -0.078          | -0.097          | -0.019          | 0.5000 |
| 0.6000                    |                 | -0.057          |                 | -0.058          | -0.057          | 0.001           | -0.054          | -0.061          | -0.007          |                 |                 |                 | -0.046          | -0.067          | -0.020          | -0.003          | -0.080          | -0.077          | -0.067          | -0.099          | -0.019          | 0.6000 |
| 0.7000                    | -0.049          |                 |                 | -0.057          | -0.065          | -0.006          | -0.058          | -0.062          | -0.005          |                 |                 |                 | -0.035          | -0.069          | -0.034          | -0.032          | -0.088          | -0.056          | -0.062          | -0.097          | -0.035          | 0.7000 |
| 0.8000                    | -0.069          | -0.080          | -0.011          | -0.057          | -0.081          | -0.024          | -0.046          | -0.077          | -0.031          |                 |                 |                 | -0.050          | -0.071          | -0.021          | -0.063          | -0.085          | -0.022          | -0.063          | -0.095          | -0.032          | 0.8000 |
| 0.9000                    | -0.054          | -0.070          | -0.016          | -0.055          | -0.070          | -0.015          | -0.069          | -0.081          | -0.012          |                 |                 |                 | -0.086          | -0.074          | 0.012           | -0.066          | -0.083          | -0.017          | -0.069          | -0.081          | -0.012          | 0.9000 |
| 1.0000                    | -0.063          | -0.046          | -0.042          | -0.053          | -0.030          | 0.022           | -0.126          | -0.074          | 0.052           |                 |                 |                 | -0.144          | -0.078          | 0.066           | -0.040          | -0.081          | -0.041          | -0.080          | -0.055          | 0.024           | 1.0000 |
| M = 1.303      α = 03.88  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.126          | 0.290           | 0.415           | -0.264          | 0.254           | 0.518           | -0.273          | 0.230           | 0.503           |                 |                 |                 | -0.350          | 0.225           | 0.575           | -0.431          | 0.248           | 0.679           | -0.439          | 0.189           |                 | 0.0000 |
| 0.0125                    | -0.116          | 0.231           | 0.346           | -0.234          | 0.199           | 0.433           | -0.307          | 0.194           | 0.500           | -0.390          | 0.199           | 0.589           | -0.358          | 0.201           | 0.560           | -0.429          | 0.210           | 0.639           | -0.445          |                 |                 | 0.0125 |
| 0.0250                    | -0.111          | 0.186           | 0.296           | -0.208          | 0.157           | 0.366           | -0.308          | 0.167           | 0.475           | -0.384          | 0.155           | 0.540           | -0.362          | 0.182           | 0.544           |                 | 0.180           |                 | -0.448          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.115          | 0.136           | 0.251           | -0.168          | 0.117           | 0.285           | -0.213          | 0.142           | 0.355           |                 |                 |                 | -0.354          | 0.155           | 0.509           | -0.427          | 0.139           | 0.566           | -0.446          | 0.158           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.110          | 0.099           | 0.209           | -0.130          | 0.096           | 0.226           | -0.194          | 0.105           | 0.299           | -0.155          |                 |                 | -0.213          | 0.118           | 0.331           | -0.430          | 0.115           | 0.545           | -0.447          | 0.139           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.105          | 0.086           | 0.191           | -0.122          | 0.081           | 0.202           | -0.156          | 0.086           | 0.242           | -0.144          | 0.073           | 0.217           | -0.189          | 0.104           | 0.293           | -0.416          | 0.101           | 0.517           | -0.449          | 0.124           |                 | 0.1000 |
| 0.1500                    | -0.100          | 0.071           | 0.171           | -0.107          | 0.063           | 0.170           | -0.113          | 0.077           | 0.190           | -0.144          | 0.068           | 0.212           | -0.158          | 0.101           | 0.259           | -0.346          | 0.082           | 0.428           | -0.454          | 0.094           | 0.562           | 0.1500 |
| 0.2000                    | -0.098          | 0.053           | 0.151           | -0.091          | 0.066           | 0.157           | -0.110          | 0.062           | 0.172           | -0.133          |                 |                 | -0.148          | 0.068           | 0.215           | -0.279          | 0.070           | 0.349           | -0.456          | 0.075           | 0.531           | 0.2000 |
| 0.3000                    | -0.092          | 0.050           | 0.142           | -0.103          | 0.064           | 0.167           | -0.108          | 0.067           | 0.175           |                 |                 |                 | -0.132          | 0.059           | 0.191           | -0.198          | 0.035           | 0.233           | -0.427          | 0.054           | 0.481           | 0.3000 |
| 0.4000                    | -0.098          | 0.040           | 0.138           | -0.105          | 0.040           | 0.145           | -0.117          | 0.051           | 0.168           |                 |                 |                 | -0.131          | 0.037           | 0.168           | -0.158          | 0.033           | 0.191           | -0.417          | 0.042           | 0.459           | 0.4000 |
| 0.5000                    | -0.109          | 0.030           | 0.138           | -0.108          | 0.021           | 0.130           | -0.118          | 0.036           | 0.154           |                 |                 |                 | -0.143          | 0.027           | 0.171           | -0.115          | 0.022           | 0.137           | -0.394          | 0.029           | 0.423           | 0.5000 |
| 0.6000                    |                 | 0.014           |                 | -0.119          | 0.012           | 0.126           | -0.131          | 0.007           | 0.138           |                 |                 |                 | -0.130          | 0.014           | 0.144           | -0.078          | 0.006           | 0.084           | -0.364          | 0.018           | 0.382           | 0.6000 |
| 0.7000                    | -0.109          |                 |                 | -0.122          | -0.004          | 0.126           | -0.131          | 0.007           | 0.138           |                 |                 |                 | -0.106          | -0.001          | 0.104           | -0.093          | 0.014           | 0.107           | -0.329          | 0.022           | 0.350           | 0.7000 |
| 0.8000                    | -0.137          | -0.014          | 0.123           | -0.119          | -0.011          | 0.108           | -0.116          | -0.002          | 0.114           |                 |                 |                 | -0.146          | 0.006           | 0.152           | -0.123          | -0.006          | 0.117           | -0.272          | 0.024           | 0.296           | 0.8000 |
| 0.9000                    | -0.122          | -0.005          | 0.117           | -0.134          | -0.005          | 0.129           | -0.158          | -0.012          | 0.146           |                 |                 |                 | -0.181          | 0.011           | 0.170           | -0.119          |                 | 0.118           | -0.210          | 0.028           | 0.238           | 0.9000 |
| 1.0000                    | -0.063          | 0.018           | 0.081           | -0.169          | 0.022           | 0.191           | -0.255          | -0.022          | 0.233           |                 |                 |                 | -0.210          | -0.053          | 0.157           | -0.079          | 0.031           | 0.110           | -0.142          | 0.035           | 0.176           | 1.0000 |
| M = 1.302      α = 07.91  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.262          | 0.377           | 0.638           | -0.492          | 0.328           | 0.820           | -0.516          | 0.266           | 0.781           |                 |                 |                 | -0.531          | 0.289           | 0.821           | -0.496          | 0.255           | 0.752           | -0.482          | 0.241           |                 | 0.0000 |
| 0.0125                    | -0.396          | 0.338           | 0.734           | -0.490          | 0.295           | 0.785           | -0.511          | 0.276           | 0.788           | -0.550          | 0.282           | 0.832           | -0.533          | 0.278           | 0.812           | -0.496          | 0.266           | 0.762           | -0.488          |                 |                 | 0.0125 |
| 0.0250                    | -0.432          | 0.304           | 0.736           | -0.492          | 0.266           | 0.758           | -0.509          | 0.277           | 0.786           | -0.553          | 0.261           | 0.814           | -0.534          | 0.268           | 0.802           |                 | 0.268           |                 | -0.493          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.211          | 0.247           | 0.458           | -0.506          | 0.225           | 0.731           | -0.510          | 0.248           | 0.758           |                 | 0.220           |                 | -0.529          | 0.249           | 0.778           | -0.499          | 0.248           | 0.747           | -0.494          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.196          | 0.205           | 0.402           | -0.424          | 0.198           | 0.622           | -0.509          | 0.206           | 0.715           | -0.541          |                 |                 | -0.535          | 0.233           | 0.767           | -0.503          | 0.228           | 0.731           | -0.496          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.201          | 0.190           | 0.391           | -0.293          | 0.178           | 0.471           | -0.483          | 0.187           | 0.670           | -0.482          | 0.186           | 0.668           | -0.533          | 0.212           | 0.745           | -0.505          | 0.211           | 0.716           | -0.498          | 0.224           | 0.722           | 0.1000 |
| 0.1500                    | -0.178          | 0.163           | 0.341           | -0.161          | 0.158           | 0.318           | -0.412          | 0.164           | 0.576           | -0.303          | 0.178           | 0.481           | -0.514          | 0.181           | 0.695           | -0.516          | 0.182           | 0.698           | -0.500          | 0.211           | 0.711           | 0.1500 |
| 0.2000                    | -0.172          | 0.143           | 0.315           | -0.165          | 0.159           | 0.324           | -0.259          | 0.166           | 0.425           | -0.247          |                 |                 | -0.483          | 0.171           | 0.654           | -0.520          | 0.165           | 0.684           | -0.504          | 0.197           | 0.701           | 0.2000 |
| 0.3000                    | -0.162          | 0.144           | 0.306           | -0.159          | 0.148           | 0.307           | -0.178          | 0.133           | 0.311           |                 |                 |                 | -0.188          | 0.140           | 0.328           | -0.536          | 0.167           | 0.683           | -0.498          | 0.185           | 0.683           | 0.3000 |
| 0.4000                    | -0.165          | 0.118           | 0.283           | -0.164          | 0.123           | 0.288           | -0.174          | 0.119           | 0.293           |                 |                 |                 | -0.180          | 0.108           | 0.288           | -0.552          | 0.122           | 0.663           | -0.509          | 0.172           | 0.682           | 0.4000 |
| 0.5000                    | -0.178          | 0.108           | 0.287           | -0.182          | 0.102           | 0.284           | -0.181          | 0.108           | 0.289           |                 |                 |                 | -0.180          | 0.108           | 0.288           | -0.552          | 0.122           | 0.674           | -0.515          | 0.154           | 0.670           | 0.5000 |
| 0.6000                    |                 | 0.101           |                 | -0.177          | 0.096           | 0.273           | -0.185          | 0.102           | 0.287           |                 |                 |                 | -0.189          | 0.094           | 0.283           | -0.540          | 0.109           | 0.649           | -0.523          | 0.132           | 0.655           | 0.6000 |
| 0.7000                    | -0.174          |                 |                 | -0.189          | 0.086           | 0.274           | -0.189          | 0.092           | 0.282           |                 |                 |                 | -0.100          | 0.098           | 0.199           | -0.459          | 0.119           | 0.579           | -0.539          | 0.119           | 0.653           | 0.7000 |
| 0.8000                    | -0.200          | 0.075           | 0.275           | -0.183          | 0.077           | 0.260           | -0.165          | 0.083           | 0.248           |                 |                 |                 | -0.202          | 0.098           | 0.300           | -0.217          | 0.104           | 0.322           | -0.539          | 0.104           | 0.649           | 0.8000 |
| 0.9000                    | -0.143          | 0.089           | 0.233           | -0.160          | 0.091           | 0.251           | -0.187          | 0.085           | 0.272           |                 |                 |                 | -0.247          | 0.091           | 0.338           | -0.100          | 0.075           | 0.175           | -0.541          | 0.108           | 0.649           | 0.9000 |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |     |
| M = 1.302      α = 11.89 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.525          | 0.425           | 0.951           | -0.600          | 0.381           | 0.981           | -0.586          | 0.349           | 0.935           | -0.567          | 0.332           | 0.900           | -0.547          | 0.348           | 0.895           | -0.527          | 0.238           | 0.765           | -0.502          | 0.250           | 0.0000          |     |
| 0.0125                   | -0.561          | 0.437           | 0.998           | -0.594          | 0.390           | 0.984           | -0.586          | 0.361           | 0.966           | -0.567          | 0.332           | 0.900           | -0.544          | 0.352           | 0.896           | -0.526          | 0.296           | 0.822           | -0.513          |                 | 0.0125          |     |
| 0.0250                   | -0.588          | 0.434           | 1.022           | -0.595          | 0.387           | 0.983           | -0.586          | 0.363           | 0.969           | -0.566          | 0.331           | 0.917           | -0.543          | 0.355           | 0.898           | -0.526          | 0.332           |                 | -0.519          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.615          | 0.386           | 1.000           | -0.617          | 0.349           | 0.966           | -0.585          | 0.340           | 0.925           |                 | 0.342           |                 | -0.543          | 0.358           | 0.901           | -0.526          | 0.338           | 0.865           | -0.521          | 0.324           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.403          | 0.348           | 0.752           | -0.631          | 0.329           | 0.959           | -0.602          | 0.318           | 0.920           | -0.582          |                 |                 | -0.547          | 0.346           | 0.893           | -0.532          | 0.333           | 0.865           | -0.526          | 0.334           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.249          | 0.318           | 0.567           | -0.625          | 0.301           | 0.926           | -0.618          | 0.304           | 0.923           | -0.607          | 0.316           | 0.923           | -0.558          | 0.335           | 0.893           | -0.534          | 0.324           | 0.858           | -0.532          | 0.326           | 0.1000          |     |
| 0.1500                   | -0.226          | 0.283           | 0.509           | -0.519          | 0.269           | 0.789           | -0.640          | 0.299           | 0.939           | -0.631          | 0.293           | 0.924           | -0.584          | 0.317           | 0.902           | -0.548          | 0.308           | 0.856           | -0.542          | 0.316           | 0.1500          |     |
| 0.2000                   | -0.212          | 0.258           | 0.470           | -0.207          | 0.288           | 0.495           | -0.633          | 0.297           | 0.930           | -0.642          |                 |                 | -0.609          | 0.299           | 0.908           | -0.555          | 0.291           | 0.846           | -0.559          | 0.304           | 0.2000          |     |
| 0.3000                   | -0.199          | 0.264           | 0.463           | -0.187          | 0.258           | 0.445           | -0.218          | 0.259           | 0.477           |                 |                 |                 | -0.627          | 0.270           | 0.897           | -0.580          | 0.266           | 0.840           | -0.579          | 0.280           | 0.3000          |     |
| 0.4000                   | -0.201          | 0.226           | 0.426           | -0.201          | 0.231           | 0.432           | -0.195          | 0.239           | 0.435           |                 |                 |                 | -0.628          | 0.257           | 0.885           | -0.606          | 0.264           | 0.875           | -0.620          | 0.260           | 0.4000          |     |
| 0.5000                   | -0.218          | 0.218           | 0.435           | -0.214          | 0.220           | 0.435           | -0.202          | 0.226           | 0.428           |                 |                 |                 | -0.317          | 0.230           | 0.547           | -0.662          | 0.256           | 0.918           | -0.644          | 0.244           | 0.5000          |     |
| 0.6000                   |                 | 0.210           |                 | -0.218          | 0.208           | 0.425           | -0.212          | 0.218           | 0.430           |                 |                 |                 | -0.220          | 0.224           | 0.444           | -0.663          | 0.226           | 0.889           | -0.654          | 0.233           | 0.6000          |     |
| 0.7000                   | -0.208          |                 |                 | -0.225          | 0.232           | 0.457           | -0.222          | 0.227           | 0.449           |                 |                 |                 | -0.170          | 0.229           | 0.399           | -0.650          | 0.194           | 0.844           | -0.595          | 0.223           | 0.7000          |     |
| 0.8000                   | -0.227          | 0.184           | 0.412           | -0.229          | 0.188           | 0.417           | -0.191          | 0.193           | 0.384           |                 |                 |                 | -0.135          | 0.204           | 0.339           | -0.659          | 0.180           | 0.839           | -0.536          | 0.208           | 0.8000          |     |
| 0.9000                   | -0.134          | 0.160           | 0.295           | -0.134          | 0.170           | 0.303           | -0.164          | 0.176           | 0.340           |                 |                 |                 | -0.197          | 0.176           | 0.373           | -0.657          | 0.167           | 0.824           | -0.522          | 0.208           | 0.9000          |     |
| 1.0000                   | 0.071           | 0.129           | 0.059           | 0.061           | 0.178           | 0.117           | -0.141          | 0.177           | 0.318           |                 |                 |                 | -0.356          | 0.145           | 0.501           | -0.645          | 0.155           | 0.800           | -0.555          | 0.223           | 1.0000          |     |
| M = 1.302      α = 15.87 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.633          | 0.473           | 1.106           | -0.666          | 0.402           | 1.067           | -0.639          | 0.349           | 0.988           |                 |                 |                 | -0.590          | 0.304           | 0.895           | -0.583          | 0.218           | 0.801           | -0.508          | 0.220           | 0.0000          |     |
| 0.0125                   | -0.652          | 0.524           | 1.176           | -0.659          | 0.450           | 1.109           | -0.638          | 0.408           | 1.046           | -0.613          | 0.366           | 0.980           | -0.588          | 0.381           | 0.969           | -0.583          | 0.322           | 0.904           | -0.502          |                 | 0.0125          |     |
| 0.0250                   | -0.667          | 0.547           | 1.215           | -0.657          | 0.476           | 1.133           | -0.637          | 0.444           | 1.081           | -0.612          | 0.428           | 1.040           | -0.586          | 0.429           | 1.015           |                 | 0.391           |                 | -0.496          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.689          | 0.507           | 1.195           | -0.665          | 0.459           | 1.124           | -0.634          | 0.444           | 1.078           |                 | 0.441           |                 | -0.584          | 0.437           | 1.021           | -0.585          | 0.425           | 1.010           | -0.485          | 0.349           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.669          | 0.469           | 1.138           | -0.691          | 0.440           | 1.131           | -0.648          | 0.434           | 1.082           | -0.615          |                 |                 | -0.588          | 0.443           | 1.031           | -0.590          | 0.432           | 1.022           | -0.478          | 0.377           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.580          | 0.440           | 1.020           | -0.692          | 0.417           | 1.109           | -0.676          | 0.428           | 1.104           | -0.635          | 0.422           | 1.058           | -0.591          | 0.434           | 1.025           | -0.591          | 0.424           | 1.015           | -0.475          | 0.388           | 0.1000          |     |
| 0.1500                   | -0.361          | 0.402           | 0.763           | -0.676          | 0.399           | 1.075           | -0.693          | 0.411           | 1.104           | -0.683          | 0.398           | 1.081           | -0.615          | 0.404           | 1.019           | -0.602          | 0.407           | 1.009           | -0.474          | 0.392           | 0.1500          |     |
| 0.2000                   | -0.291          | 0.380           | 0.671           | -0.553          | 0.403           | 0.956           | -0.699          | 0.410           | 1.109           | -0.688          |                 |                 | -0.660          | 0.401           | 1.061           | -0.595          | 0.390           | 0.985           | -0.484          | 0.393           | 0.2000          |     |
| 0.3000                   | -0.254          | 0.364           | 0.619           | -0.331          | 0.362           | 0.693           | -0.613          | 0.376           | 0.989           |                 |                 |                 | -0.679          | 0.389           | 1.068           | -0.611          | 0.358           | 0.970           | -0.504          | 0.382           | 0.3000          |     |
| 0.4000                   | -0.267          | 0.332           | 0.599           | -0.295          | 0.350           | 0.644           | -0.397          | 0.368           | 0.766           |                 |                 |                 | -0.697          | 0.375           | 1.072           | -0.650          | 0.337           | 0.987           | -0.536          | 0.365           | 0.4000          |     |
| 0.5000                   | -0.272          | 0.353           | 0.624           | -0.284          | 0.351           | 0.636           | -0.317          | 0.363           | 0.681           |                 |                 |                 | -0.656          | 0.338           | 0.994           | -0.587          | 0.338           | 0.925           | -0.551          | 0.349           | 0.5000          |     |
| 0.6000                   |                 | 0.308           |                 | -0.282          | 0.302           | 0.584           | -0.300          | 0.337           | 0.637           |                 |                 |                 | -0.582          | 0.326           | 0.908           | -0.591          | 0.323           | 0.913           | -0.566          | 0.332           | 0.6000          |     |
| 0.7000                   | -0.250          |                 |                 | -0.279          | 0.287           | 0.566           | -0.289          | 0.302           | 0.591           |                 |                 |                 | -0.481          | 0.308           | 0.789           | -0.596          | 0.314           | 0.910           | -0.578          | 0.324           | 0.7000          |     |
| 0.8000                   | -0.276          | 0.275           | 0.551           | -0.287          | 0.291           | 0.578           | -0.293          | 0.297           | 0.591           |                 |                 |                 | -0.119          | 0.306           | 0.425           | -0.599          | 0.290           | 0.889           | -0.574          | 0.315           | 0.8000          |     |
| 0.9000                   | -0.282          | 0.263           | 0.545           | -0.142          | 0.279           | 0.421           | -0.169          | 0.282           | 0.452           |                 |                 |                 | -0.320          | 0.291           | 0.610           | -0.593          | 0.281           | 0.873           | -0.562          | 0.318           | 0.9000          |     |
| 1.0000                   | -0.269          | 0.255           | 0.524           | 0.157           | 0.250           | 0.094           | 0.082           | 0.257           | 0.174           |                 |                 |                 | -1.082          | 0.263           | 1.345           | -0.579          | 0.285           | 0.864           | -0.543          | 0.331           | 1.0000          |     |
| M = 1.499      α = 03.83 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.116          | 0.255           | 0.372           | -0.257          | 0.239           | 0.495           | -0.259          | 0.230           | 0.489           |                 |                 |                 | -0.304          | 0.251           | 0.555           | -0.385          | 0.245           | 0.629           | -0.479          | 0.188           | 0.0000          |     |
| 0.0125                   | -0.118          | 0.200           | 0.318           | -0.218          | 0.185           | 0.403           | -0.263          | 0.185           | 0.447           | -0.309          | 0.204           | 0.513           | -0.305          | 0.195           | 0.500           | -0.369          | 0.202           | 0.571           | -0.449          |                 | 0.0125          |     |
| 0.0250                   | -0.120          | 0.157           | 0.277           | -0.188          | 0.145           | 0.333           | -0.261          | 0.151           | 0.412           | -0.290          | 0.163           | 0.454           | -0.304          | 0.155           | 0.459           |                 | 0.169           |                 | -0.429          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.123          | 0.114           | 0.237           | -0.155          | 0.103           | 0.258           | -0.239          | 0.120           | 0.359           |                 | 0.122           |                 | -0.292          | 0.122           | 0.414           | -0.346          | 0.133           | 0.479           | -0.421          | 0.149           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.114          | 0.087           | 0.201           | -0.133          | 0.086           | 0.219           | -0.186          | 0.102           | 0.287           | -0.147          |                 |                 | -0.247          | 0.103           | 0.350           | -0.351          | 0.115           | 0.466           | -0.422          | 0.131           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.109          | 0.077           | 0.186           | -0.119          | 0.079           | 0.198           | -0.138          | 0.089           | 0.226           | -0.129          | 0.073           | 0.203           | -0.149          | 0.096           | 0.245           | -0.348          | 0.103           | 0.452           | -0.422          | 0.108           | 0.1000          |     |
| 0.1500                   | -0.098          | 0.071           | 0.168           | -0.096          | 0.066           | 0.162           | -0.096          | 0.058           | 0.154           | -0.113          | 0.064           | 0.176           | -0.121          | 0.078           | 0.199           | -0.308          | 0.073           | 0.381           | -0.422          | 0.090           | 0.1500          |     |
| 0.2000                   | -0.081          | 0.055           | 0.136           | -0.078          | 0.057           | 0.135           | -0.090          | 0.067           | 0.157           | -0.099          |                 |                 | -0.113          | 0.059           | 0.172           | -0.210          | 0.059           | 0.269           | -0.422          | 0.075           | 0.2000          |     |
| 0.3000                   | -0.071          | 0.037           | 0.108           | -0.075          | 0.042           | 0.117           | -0.089          | 0.040           | 0.129           |                 |                 |                 | -0.112          | 0.049           | 0.161           | -0.153          | 0.040           | 0.193           | -0.376          | 0.050           | 0.3000          |     |
| 0.4000                   | -0.085          | 0.025           | 0.110           | -0.092          | 0.032           | 0.125           | -0.095          | 0.032           | 0.127           |                 |                 |                 | -0.109          | 0.037           | 0.145           | -0.143          | 0.034           | 0.177           | -0.309          | 0.033           | 0.4000          |     |
| 0.5000                   | -0.095          | 0.021           | 0.116           | -0.095          | 0.020           | 0.116           | -0.102          | 0.026           | 0.128           |                 |                 |                 | -0.109          | 0.026           | 0.136           | -0.134          | 0.021           | 0.155           | -0.240          | 0.026           | 0.5000          |     |
| 0.6000                   |                 | 0.010           |                 | -0.101          | 0.008           | 0.108           | -0.105          | 0.013           | 0.118           |                 |                 |                 | -0.108          | 0.025           | 0.134           | -0.085          | 0.020           | 0.104           | -0.209          | 0.018           | 0.6000          |     |
| 0.7000                   | -0.097          |                 |                 | -0.110          | 0.016           | 0.125           | -0.109          | 0.017           | 0.126           |                 |                 |                 | -0.082          | 0.012           | 0.095           | -0.086          | 0.010           | 0.096           | -0.184          | 0.013           | 0.7000          |     |
| 0.8000                   | -0.123          | -0.003          | 0.120           | -0.117          | 0.004           | 0.121           | -0.104          | 0.017           | 0.121           |                 |                 |                 | -0.128          | 0.014           | 0.142           | -0.106          | -0.002          | 0.104           | -0.165          | 0.009           | 0.8000          |     |
| 0.9000                   | -0.111          | 0.004           | 0.116           | -0.110          | 0.004           | 0.113           | -0.123          | -0.001          | 0.122           |                 |                 |                 | -0.156          | 0.001           | 0.157           | -0.102          | -0.001          | 0.101           | -0.157          | 0.017           | 0.9000          |     |
| 1.0000                   | -0.064          | 0.020           | 0.084           | -0.089          | 0.014           | 0.102           | -0.166          | -0.035          | 0.131           |                 |                 |                 | -0.167          | -0.028          | 0.139           | -0.075          | 0.012           | 0.087           | -0.162          | 0.036           | 1.0000          |     |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.703      α = 03.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.107          | 0.253           | 0.359           | -0.193          | 0.248           | 0.441           | -0.191          | 0.225           | 0.416           | -0.230          | 0.198           | 0.428           | -0.284          | 0.229           | 0.514           | -0.300          | 0.235           | 0.535           | -0.314          | 0.173           | 0.0000          |        |
| 0.0125                   | -0.099          | 0.199           | 0.298           | -0.160          | 0.195           | 0.354           | -0.189          | 0.194           | 0.383           | -0.230          | 0.198           | 0.428           | -0.262          | 0.184           | 0.445           | -0.290          | 0.189           | 0.480           | -0.326          |                 | 0.0125          |        |
| 0.0250                   | -0.092          | 0.160           | 0.252           | -0.136          | 0.154           | 0.290           | -0.185          | 0.167           | 0.351           | -0.206          | 0.154           | 0.360           | -0.245          | 0.150           | 0.394           |                 | 0.154           |                 | -0.331          |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.133           | 0.0420          |        |
| 0.0500                   | -0.084          | 0.124           | 0.208           | -0.112          | 0.114           | 0.226           | -0.169          | 0.124           | 0.294           |                 | 0.113           |                 | -0.227          | 0.117           | 0.344           | -0.267          | 0.115           | 0.382           | -0.319          |                 | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.116           | 0.0640          |        |
| 0.0750                   | -0.072          | 0.098           | 0.171           | -0.100          | 0.099           | 0.200           | -0.149          | 0.094           | 0.243           | -0.175          |                 |                 | -0.215          | 0.096           | 0.310           | -0.257          | 0.091           | 0.348           | -0.314          |                 | 0.0750          |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.106           | 0.0810          |        |
| 0.1000                   | -0.068          | 0.090           | 0.158           | -0.092          | 0.077           | 0.169           | -0.128          | 0.082           | 0.210           | -0.157          | 0.076           | 0.233           | -0.209          | 0.087           | 0.296           | -0.249          | 0.081           | 0.330           | -0.307          | 0.097           | 0.404           | 0.1000 |
| 0.1500                   | -0.071          | 0.069           | 0.140           | -0.090          | 0.060           | 0.150           | -0.116          | 0.068           | 0.185           | -0.128          | 0.054           | 0.183           | -0.161          | 0.071           | 0.232           | -0.252          | 0.064           | 0.316           | -0.296          | 0.082           | 0.378           | 0.1500 |
| 0.2000                   | -0.081          | 0.050           | 0.131           | -0.091          | 0.064           | 0.155           | -0.109          | 0.069           | 0.179           | -0.112          |                 |                 | -0.134          | 0.053           | 0.187           | -0.246          | 0.059           | 0.305           | -0.295          | 0.070           | 0.366           | 0.2000 |
| 0.3000                   | -0.092          | 0.045           | 0.137           | -0.093          | 0.038           | 0.131           | -0.101          | 0.050           | 0.151           |                 |                 |                 | -0.113          | 0.041           | 0.154           | -0.206          | 0.028           | 0.235           | -0.279          | 0.052           | 0.331           | 0.3000 |
| 0.4000                   | -0.074          | 0.015           | 0.089           | -0.075          | 0.015           | 0.090           | -0.092          | 0.025           | 0.117           |                 |                 |                 | -0.101          | 0.027           | 0.127           | -0.135          | 0.022           | 0.157           | -0.290          | 0.037           | 0.326           | 0.4000 |
| 0.5000                   | -0.085          | 0.024           | 0.109           | -0.087          | 0.025           | 0.111           | -0.086          | 0.016           | 0.102           |                 |                 |                 | -0.103          | 0.022           | 0.126           | -0.122          | 0.025           | 0.147           | -0.288          | 0.024           | 0.312           | 0.5000 |
| 0.6000                   |                 | 0.019           |                 | -0.093          | 0.018           | 0.111           | -0.100          | 0.018           | 0.118           |                 |                 |                 | -0.106          | 0.019           | 0.125           | -0.080          | 0.013           | 0.093           | -0.275          | 0.015           | 0.291           | 0.6000 |
| 0.7000                   | -0.077          |                 |                 | -0.097          | 0.010           | 0.107           | -0.100          | 0.019           | 0.119           |                 |                 |                 | -0.086          | 0.015           | 0.101           | -0.078          | 0.023           | 0.102           | -0.246          | 0.018           | 0.264           | 0.7000 |
| 0.8000                   | -0.112          | -0.002          | 0.110           | -0.108          | 0.001           | 0.109           | -0.103          | 0.003           | 0.106           |                 |                 |                 | -0.110          | 0.007           | 0.117           | -0.092          | 0.009           | 0.100           | -0.203          | 0.021           | 0.224           | 0.8000 |
| 0.9000                   | -0.117          | -0.015          | 0.102           | -0.105          | -0.013          | 0.092           | -0.112          | -0.009          | 0.103           |                 |                 |                 | -0.134          | -0.003          | 0.130           | -0.100          | -0.005          | 0.095           | -0.170          | 0.029           | 0.199           | 0.9000 |
| 1.0000                   | -0.092          | -0.031          | 0.061           | -0.087          | -0.032          | 0.055           | -0.126          | -0.019          | 0.107           |                 |                 |                 | -0.157          | -0.016          | 0.141           | -0.103          | -0.019          | 0.085           | -0.148          | 0.041           | 0.189           | 1.0000 |
| M = 1.908      α = 03.93 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.068          | 0.280           | 0.349           | -0.133          | 0.259           | 0.392           | -0.147          | 0.249           | 0.396           |                 |                 |                 | -0.173          | 0.243           | 0.416           | -0.174          | 0.249           | 0.423           | -0.167          | 0.181           | 0.0000          |        |
| 0.0125                   | -0.067          | 0.215           | 0.282           | -0.115          | 0.207           | 0.322           | -0.144          | 0.194           | 0.338           | -0.163          | 0.215           | 0.378           | -0.162          | 0.210           | 0.372           | -0.172          | 0.209           | 0.381           | -0.195          |                 |                 | 0.0125 |
| 0.0250                   | -0.066          | 0.169           | 0.235           | -0.102          | 0.166           | 0.268           | -0.139          | 0.156           | 0.295           | -0.152          | 0.177           | 0.329           | -0.154          | 0.182           | 0.337           |                 | 0.178           |                 | -0.210          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.148           |                 | 0.0420 |
| 0.0500                   | -0.065          | 0.129           | 0.195           | -0.091          | 0.119           | 0.211           | -0.122          | 0.132           | 0.254           |                 | 0.140           |                 | -0.147          | 0.143           | 0.291           | -0.171          | 0.142           | 0.313           | -0.204          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.132           |                 | 0.0640 |
| 0.0750                   | -0.062          | 0.101           | 0.163           | -0.086          | 0.102           | 0.189           | -0.113          | 0.112           | 0.225           | -0.127          |                 |                 | -0.139          | 0.118           | 0.257           | -0.174          | 0.121           | 0.295           | -0.204          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.121           |                 | 0.0810 |
| 0.1000                   | -0.059          | 0.100           | 0.159           | -0.083          | 0.088           | 0.171           | -0.108          | 0.107           | 0.215           | -0.123          | 0.099           | 0.222           | -0.136          | 0.107           | 0.243           | -0.173          | 0.108           | 0.281           | -0.198          | 0.113           | 0.312           | 0.1000 |
| 0.1500                   | -0.057          | 0.083           | 0.140           | -0.075          | 0.085           | 0.161           | -0.099          | 0.086           | 0.185           | -0.115          | 0.078           | 0.193           | -0.132          | 0.096           | 0.229           | -0.174          | 0.087           | 0.261           | -0.197          | 0.100           | 0.297           | 0.1500 |
| 0.2000                   | -0.059          | 0.074           | 0.133           | -0.064          | 0.081           | 0.145           | -0.077          | 0.097           | 0.174           | -0.093          |                 |                 | -0.127          | 0.080           | 0.208           | -0.161          | 0.076           | 0.237           | -0.209          | 0.089           | 0.298           | 0.2000 |
| 0.3000                   | -0.063          | 0.056           | 0.119           | -0.061          | 0.065           | 0.126           | -0.073          | 0.067           | 0.140           |                 |                 |                 | -0.112          | 0.073           | 0.185           | -0.168          | 0.050           | 0.219           | -0.184          | 0.070           | 0.253           | 0.3000 |
| 0.4000                   | -0.060          | 0.042           | 0.103           | -0.064          | 0.045           | 0.109           | -0.073          | 0.051           | 0.124           |                 |                 |                 | -0.081          | 0.046           | 0.127           | -0.161          | 0.040           | 0.201           | -0.194          | 0.051           | 0.245           | 0.4000 |
| 0.5000                   | -0.068          | 0.032           | 0.100           | -0.070          | 0.030           | 0.099           | -0.074          | 0.025           | 0.099           |                 |                 |                 | -0.086          | 0.024           | 0.110           | -0.128          | 0.031           | 0.159           | -0.197          | 0.039           | 0.236           | 0.5000 |
| 0.6000                   |                 | 0.021           |                 | -0.069          | 0.011           | 0.080           | -0.077          | 0.011           | 0.088           |                 |                 |                 | -0.084          | 0.016           | 0.100           | -0.077          | 0.018           | 0.095           | -0.195          | 0.024           | 0.219           | 0.6000 |
| 0.7000                   | -0.050          |                 |                 | -0.076          | 0.018           | 0.094           | -0.079          | 0.017           | 0.096           |                 |                 |                 | -0.073          | 0.018           | 0.091           | -0.061          | 0.016           | 0.077           | -0.193          | 0.020           | 0.213           | 0.7000 |
| 0.8000                   | -0.089          |                 | 0.088           | -0.085          | 0.005           | 0.090           | -0.086          | 0.006           | 0.092           |                 |                 |                 | -0.083          | 0.009           | 0.093           | -0.069          | 0.010           | 0.078           | -0.190          | 0.018           | 0.208           | 0.8000 |
| 0.9000                   | -0.093          | -0.005          | 0.087           | -0.081          | -0.003          | 0.078           | -0.089          | -0.001          | 0.084           |                 |                 |                 | -0.101          | 0.006           | 0.107           | -0.075          | 0.003           | 0.078           | -0.186          | 0.025           | 0.210           | 0.9000 |
| 1.0000                   | -0.062          | -0.007          | 0.056           | -0.065          | -0.008          | 0.058           | -0.075          | -0.001          | 0.073           |                 |                 |                 | -0.126          | 0.008           | 0.134           | -0.080          | -0.004          | 0.076           | -0.179          | 0.041           | 0.219           | 1.0000 |
| M = 2.230      α = 03.73 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.235           | -0.021          | -0.256          | 0.205           | -0.029          | -0.233          | 0.189           | 0.003           | -0.186          |                 |                 |                 | 0.222           | 0.000           | -0.222          | 0.210           | -0.042          | -0.252          | 0.225           | -0.161          |                 | 0.0000 |
| 0.0125                   | 0.174           | -0.019          | -0.193          | 0.159           | -0.031          | -0.190          | 0.156           | -0.026          | -0.182          | 0.162           | -0.044          | -0.206          | 0.176           | -0.025          | -0.202          | 0.179           | -0.042          | -0.222          | 0.173           |                 |                 | 0.0125 |
| 0.0250                   | 0.127           | -0.019          | -0.146          | 0.125           | -0.033          | -0.158          | 0.130           | -0.044          | -0.174          | 0.130           | -0.056          | -0.185          | 0.141           | -0.038          | -0.179          |                 | -0.045          |                 | 0.136           |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.065          |                 | 0.0420 |
| 0.0500                   | 0.080           | -0.020          | -0.100          | 0.090           | -0.035          | -0.125          | 0.100           | -0.050          | -0.150          |                 | -0.063          |                 | 0.100           | -0.025          | -0.125          | 0.112           | -0.058          | -0.170          | 0.106           |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.058          |                 | 0.0640 |
| 0.0750                   | 0.076           | -0.027          | -0.103          | 0.072           | -0.036          | -0.108          | 0.079           | -0.052          | -0.130          | 0.076           |                 |                 | 0.083           | -0.040          | -0.123          | 0.089           | -0.059          | -0.148          | 0.088           |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.072          |                 | 0.0810 |
| 0.1000                   | 0.063           | -0.026          | -0.089          | 0.061           | -0.038          | -0.099          | 0.064           | -0.050          | -0.114          | 0.063           | -0.052          | -0.115          | 0.068           | -0.046          | -0.114          | 0.072           | -0.069          | -0.141          | 0.077           | -0.073          | -0.150          | 0.1000 |
| 0.1500                   | 0.054           | -0.022          | -0.075          | 0.049           | -0.039          | -0.088          | 0.054           | -0.045          | -0.099          | 0.046           | -0.051          | -0.097          | 0.053           | -0.050          | -0.103          | 0.054           | -0.078          | -0.132          | 0.064           | -0.072          | -0.136          | 0.1500 |
| 0.2000                   | 0.042           | -0.026          | -0.068          | 0.043           | -0.038          | -0.081          | 0.046           | -0.046          | -0.104          | 0.040           |                 |                 | 0.045           | -0.049          | -0.093          | 0.048           | -0.071          | -0.120          | 0.052           | -0.077          | -0.128          | 0.2000 |
| 0.3000                   | 0.040           | -0.033          | -0.073          | 0.030           | -0.034          | -0.064          | 0.030           | -0.040          | -0.071          |                 |                 |                 | 0.034           | -0.047          | -0.080          | 0.033           | -0.081          | -0.114          | 0.050           | -0.078          | -0.128          | 0.3000 |
| 0.4000                   | 0.017           | -0.031          | -0.048          | 0.019           | -0.031          | -0.050          | 0.016           | -0.042          | -0.059          |                 |                 |                 | 0.024           | -0.044          | -0.068          | 0.029           | -0.084          | -0.113          | 0.029           | -0.081          | -0.111          | 0.4000 |
| 0.5000                   | 0.009           | -0.034          | -0.042          | 0.010           | -0.035          | -0.045          | 0.015           | -0.043          | -0.058          |                 |                 |                 | 0.016           | -0.040          | -0.055          | 0.021           | -0.082          | -0.103          | 0.025           | -0.087          | -0.112          | 0.5000 |
| 0.6000                   |                 | -0.038          |                 | 0.010           | -0.043          | -0.053          | 0.013           | -0.049          | -0.062          |                 |                 |                 | 0.012           | -0.045          | -0.057          | 0.036           | -0.080          | -0.116          | 0.020           | -0.095          | -0.115          | 0.6000 |
| 0.7000                   | 0.040           |                 |                 | 0.009           | -0.040          | -0.049          | 0.005           | -0.047          | -0.053          |                 |                 |                 | 0.010           | -0.048          | -0.058          | 0.027           | -0.070          | -0.097          | 0.017           | -0.090          | -0.107          | 0.7000 |
| 0.8000                   | 0.003           | -0.053          | -0.056          | 0.007           | -0.048          | -0.055          | 0.008           | -0.049          | -0.057          |                 |                 |                 | 0.028           | -0.045          | -0.073          | 0.009           | -0.071          | -0.080          | 0.015           | -0.090          | -0.105          | 0.8000 |
| 0.9000                   | 0.005           | -0.051          | -0.056          | 0.008           | -0.047          | -0.055          | 0.009           | -0.050          | -0.058          |                 |                 |                 | 0.014           | -0              |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

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| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 2.237      α = 00.20 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.098           | 0.120           | 0.022           | 0.078           | 0.116           | 0.037           | 0.063           | 0.110           | 0.047           | 0.058           | 0.093           | 0.035           | 0.061           | 0.124           | 0.063           | 0.051           | 0.053           |                 |                 |                 | 0.0000          |        |
| 0.0125                   | 0.062           | 0.084           | 0.022           | 0.049           | 0.078           | 0.029           | 0.042           | 0.072           | 0.029           | 0.043           | 0.077           | 0.034           | 0.044           | 0.087           | 0.042           | 0.028           |                 |                 |                 |                 | 0.0125          |        |
| 0.0250                   | 0.035           | 0.058           | 0.023           | 0.026           | 0.050           | 0.023           | 0.025           | 0.045           | 0.020           | 0.021           | 0.049           | 0.028           | 0.031           | 0.058           | 0.040           | 0.010           |                 |                 |                 |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | 0.006           | 0.036           | 0.030           | 0.002           | 0.023           | 0.020           | 0.001           | 0.025           | 0.024           |                 | 0.022           |                 | 0.003           | 0.023           | 0.020           | 0.006           | 0.027           | 0.021           | -0.007          | 0.028           | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | 0.003           | 0.017           | 0.014           | -0.006          | 0.011           | 0.017           | -0.008          | 0.006           | 0.014           | -0.012          |                 | -0.009          | 0.021           | 0.030           | -0.009          | 0.013           | 0.022           | -0.019          |                 | 0.018           | 0.0750          |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.002          | 0.014           | 0.015           | -0.010          | 0.005           | 0.014           | -0.016          | 0.001           | 0.017           | -0.020          | 0.004           | 0.024           | -0.017          | 0.009           | 0.027           | -0.021          | 0.007           | 0.028           | -0.026          | 0.006           | 0.031           | 0.1000 |
| 0.1500                   | -0.007          | 0.008           | 0.014           | -0.016          | -0.002          | 0.014           | -0.022          | -0.006          | 0.016           | -0.026          | -0.003          | 0.023           | -0.025          | 0.000           | 0.026           | -0.037          | -0.005          | 0.032           | -0.035          | -0.001          | 0.034           | 0.1500 |
| 0.2000                   | -0.015          | -0.002          | 0.013           | -0.017          | -0.002          | 0.014           | -0.027          | -0.006          | 0.016           | -0.026          |                 |                 | -0.030          | -0.005          | 0.024           | -0.036          | -0.010          | 0.026           | -0.048          | -0.009          | 0.039           | 0.2000 |
| 0.3000                   | -0.008          | -0.014          | -0.006          | -0.021          | 0.010           | 0.032           | -0.022          | 0.032           | 0.058           |                 |                 |                 | -0.032          | -0.010          | 0.022           | -0.046          | -0.022          | 0.024           | -0.040          | -0.018          | 0.022           | 0.3000 |
| 0.4000                   | -0.031          | -0.017          | 0.014           | -0.030          | -0.015          | 0.015           | -0.032          | -0.013          | 0.019           |                 |                 |                 | -0.033          | -0.012          | 0.021           | -0.043          | -0.023          | 0.020           | -0.058          | -0.026          | 0.032           | 0.4000 |
| 0.5000                   | -0.035          | -0.018          | 0.017           | -0.033          | -0.017          | 0.016           | -0.034          | -0.020          | 0.014           |                 |                 |                 | -0.037          | -0.015          | 0.022           | -0.044          | -0.024          | 0.020           | -0.062          | -0.030          | 0.032           | 0.5000 |
| 0.6000                   | -0.024          |                 |                 | -0.023          | -0.024          | 0.009           | -0.038          | -0.020          | 0.018           |                 |                 |                 | -0.041          | -0.023          | 0.017           | -0.029          | -0.030          |                 | -0.064          | -0.038          | 0.025           | 0.6000 |
| 0.7000                   | 0.005           |                 |                 | -0.033          | -0.021          | 0.011           | -0.038          | -0.027          | 0.011           |                 |                 |                 | -0.033          | -0.027          | 0.006           | 0.015           | -0.034          | -0.019          | -0.064          | -0.040          | 0.023           | 0.7000 |
| 0.8000                   | -0.037          | -0.035          | 0.002           | -0.035          | -0.025          | 0.010           | -0.037          | -0.023          | 0.014           |                 |                 |                 | -0.030          | -0.026          | 0.004           | 0.029           | -0.039          | -0.010          | -0.064          | -0.042          | 0.021           | 0.8000 |
| 0.9000                   | -0.036          | -0.032          | 0.004           | -0.034          | -0.029          | 0.004           | -0.035          | -0.027          | 0.007           |                 |                 |                 | -0.042          | -0.030          | 0.012           | -0.034          | -0.039          | -0.005          | -0.064          | -0.037          | 0.027           | 0.9000 |
| 1.0000                   | 0.006           | -0.023          | -0.030          | -0.028          | -0.034          | -0.006          | -0.031          | -0.040          | -0.009          |                 |                 |                 | -0.070          | -0.042          | 0.028           | -0.030          | -0.033          | -0.002          | -0.065          | -0.026          | 0.039           | 1.0000 |
| M = 2.235      α = 04.18 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.047          | 0.263           | 0.310           | -0.054          | 0.241           | 0.295           | -0.081          | 0.202           | 0.283           |                 |                 |                 | -0.050          | 0.219           | 0.269           | -0.076          | 0.245           | 0.321           | -0.069          | 0.197           |                 | 0.0000 |
| 0.0125                   | -0.052          | 0.199           | 0.251           | -0.065          | 0.195           | 0.260           | -0.077          | 0.190           | 0.267           | -0.091          | 0.195           | 0.286           | -0.068          | 0.195           | 0.263           | -0.078          | 0.207           | 0.285           | -0.095          |                 |                 | 0.0125 |
| 0.0250                   | -0.056          | 0.154           | 0.210           | -0.073          | 0.158           | 0.231           | -0.076          | 0.174           | 0.250           | -0.091          | 0.156           | 0.247           | -0.080          | 0.173           | 0.253           |                 | 0.177           |                 | -0.111          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.059          | 0.122           | 0.181           | -0.078          | 0.112           | 0.190           | -0.083          | 0.127           | 0.210           |                 | 0.119           |                 | -0.084          | 0.135           | 0.218           | -0.087          | 0.142           | 0.229           | -0.110          | 0.152           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.059          | 0.094           | 0.153           | -0.075          | 0.095           | 0.170           | -0.088          | 0.103           | 0.191           | -0.093          |                 |                 | -0.092          | 0.112           | 0.204           | -0.094          | 0.118           | 0.213           | -0.112          | 0.136           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.060          | 0.086           | 0.146           | -0.074          | 0.081           | 0.154           | -0.085          | 0.082           | 0.167           | -0.092          | 0.088           | 0.180           | -0.095          | 0.097           | 0.192           | -0.100          | 0.108           | 0.207           | -0.111          | 0.120           | 0.231           | 0.1000 |
| 0.1500                   | -0.056          | 0.072           | 0.128           | -0.075          | 0.065           | 0.139           | -0.086          | 0.069           | 0.156           | -0.091          | 0.073           | 0.165           | -0.096          | 0.082           | 0.178           | -0.111          | 0.087           | 0.198           | -0.113          | 0.106           | 0.219           | 0.1500 |
| 0.2000                   | -0.060          | 0.054           | 0.114           | -0.071          | 0.058           | 0.129           | -0.086          | 0.101           | 0.187           | -0.092          |                 |                 | -0.096          | 0.069           | 0.165           | -0.104          | 0.075           | 0.180           | -0.124          | 0.095           | 0.219           | 0.2000 |
| 0.3000                   | -0.046          | 0.038           | 0.084           | -0.060          | 0.061           | 0.121           | -0.078          | 0.053           | 0.131           |                 |                 |                 | -0.094          | 0.055           | 0.149           | -0.114          | 0.058           | 0.173           | -0.108          | 0.077           | 0.185           | 0.3000 |
| 0.4000                   | -0.065          | 0.031           | 0.095           | -0.064          | 0.033           | 0.097           | -0.071          | 0.032           | 0.103           |                 |                 |                 | -0.088          | 0.044           | 0.133           | -0.110          | 0.050           | 0.160           | -0.124          | 0.064           | 0.187           | 0.4000 |
| 0.5000                   | -0.065          | 0.027           | 0.092           | -0.064          | 0.028           | 0.092           | -0.067          | 0.027           | 0.094           |                 |                 |                 | -0.077          | 0.033           | 0.111           | -0.111          | 0.040           | 0.151           | -0.129          | 0.056           | 0.185           | 0.5000 |
| 0.6000                   | -0.020          | 0.017           |                 | -0.061          | 0.018           | 0.079           | -0.068          | 0.019           | 0.087           |                 |                 |                 | -0.072          | 0.027           | 0.100           | -0.106          | 0.028           | 0.134           | -0.130          | 0.043           | 0.174           | 0.6000 |
| 0.7000                   | -0.065          | 0.005           | 0.070           | -0.064          | 0.015           | 0.080           | -0.068          | 0.018           | 0.086           |                 |                 |                 | -0.067          | 0.024           | 0.092           | -0.091          | 0.021           | 0.112           | -0.127          | 0.039           | 0.166           | 0.7000 |
| 0.8000                   | -0.066          | 0.009           | 0.076           | -0.064          | 0.012           | 0.076           | -0.067          | 0.017           | 0.085           |                 |                 |                 | -0.064          | 0.020           | 0.084           | -0.080          | 0.014           | 0.094           | -0.122          | 0.035           | 0.157           | 0.8000 |
| 0.9000                   | -0.066          | 0.009           | 0.076           | -0.064          | 0.012           | 0.076           | -0.067          | 0.017           | 0.085           |                 |                 |                 | -0.078          | 0.015           | 0.094           | -0.070          | 0.010           | 0.079           | -0.115          | 0.039           | 0.154           | 0.9000 |
| 1.0000                   | -0.024          | 0.020           | 0.044           | -0.061          | 0.009           | 0.069           | -0.065          | 0.015           | 0.080           |                 |                 |                 | -0.111          | 0.011           | 0.121           | -0.060          | 0.008           | 0.068           | -0.107          | 0.050           | 0.157           | 1.0000 |
| M = 2.234      α = 08.21 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.155          | 0.352           | 0.507           | -0.138          | 0.323           | 0.460           | -0.155          | 0.302           | 0.457           |                 |                 |                 | -0.151          | 0.312           | 0.463           | -0.152          | 0.307           | 0.459           | -0.140          | 0.255           |                 | 0.0000 |
| 0.0125                   | -0.142          | 0.290           | 0.432           | -0.146          | 0.278           | 0.424           | -0.155          | 0.269           | 0.424           | -0.160          | 0.275           | 0.435           | -0.157          | 0.280           | 0.437           | -0.151          | 0.283           | 0.434           | -0.163          |                 |                 | 0.0125 |
| 0.0250                   | -0.134          | 0.245           | 0.380           | -0.151          | 0.243           | 0.393           | -0.155          | 0.244           | 0.399           | -0.162          | 0.243           | 0.404           | -0.160          | 0.253           | 0.413           |                 | 0.263           |                 | -0.176          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.135          | 0.208           | 0.343           | -0.150          | 0.196           | 0.346           | -0.154          | 0.213           | 0.368           |                 | 0.207           |                 | -0.152          | 0.216           | 0.367           | -0.151          | 0.233           | 0.384           | -0.171          | 0.242           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.138          | 0.175           | 0.313           | -0.148          | 0.177           | 0.326           | -0.153          | 0.181           | 0.334           | -0.154          |                 |                 | -0.156          | 0.200           | 0.356           | -0.155          | 0.209           | 0.364           | -0.172          | 0.232           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.138          | 0.167           | 0.305           | -0.146          | 0.158           | 0.304           | -0.150          | 0.159           | 0.310           | -0.152          | 0.169           | 0.322           | -0.158          | 0.186           | 0.344           | -0.156          | 0.196           | 0.352           | -0.170          | 0.214           | 0.383           | 0.1000 |
| 0.1500                   | -0.129          | 0.143           | 0.272           | -0.146          | 0.134           | 0.280           | -0.151          | 0.144           | 0.295           | -0.151          | 0.150           | 0.302           | -0.154          | 0.159           | 0.313           | -0.166          | 0.172           | 0.338           | -0.168          | 0.198           | 0.366           | 0.1500 |
| 0.2000                   | -0.105          | 0.121           | 0.226           | -0.145          | 0.126           | 0.272           | -0.152          | 0.179           | 0.332           | -0.152          |                 |                 | -0.156          | 0.144           | 0.300           | -0.153          | 0.157           | 0.309           | -0.179          | 0.184           | 0.362           | 0.2000 |
| 0.3000                   | -0.088          | 0.101           | 0.188           | -0.131          | 0.118           | 0.246           | -0.151          | 0.113           | 0.263           |                 |                 |                 | -0.154          | 0.119           | 0.273           | -0.162          | 0.134           | 0.296           | -0.157          | 0.159           | 0.316           | 0.3000 |
| 0.4000                   | -0.096          | 0.089           | 0.184           | -0.092          | 0.091           | 0.183           | -0.147          | 0.096           | 0.243           |                 |                 |                 | -0.153          | 0.112           | 0.265           | -0.158          | 0.120           | 0.279           | -0.173          | 0.143           | 0.315           | 0.4000 |
| 0.5000                   | -0.093          | 0.084           | 0.177           | -0.090          | 0.082           | 0.172           | -0.132          | 0.088           | 0.220           |                 |                 |                 | -0.149          | 0.097           | 0.246           | -0.164          | 0.108           | 0.272           | -0.177          | 0.132           | 0.308           | 0.5000 |
| 0.6000                   |                 | 0.067           |                 | -0.088          | 0.067           | 0.156           | -0.104          | 0.076           | 0.180           |                 |                 |                 | -0.143          | 0.086           | 0.230           | -0.164          | 0.093           | 0.257           | -0.176          | 0.118           | 0.285           | 0.6000 |
| 0.7000                   | -0.044          |                 |                 | -0.092          | 0.066           | 0.158           | -0.092          | 0.072           | 0.164           |                 |                 |                 | -0.136          | 0.077           | 0.213           | -0.157          | 0.086           | 0.243           | -0.172          | 0.114           | 0.285           | 0.7000 |
| 0.8000                   | -0.091          | 0.053           | 0.143           | -0.096          | 0.063           | 0.159           | -0.094          | 0.070           | 0.164           |                 |                 |                 | -0.123          | 0.074           | 0.198           | -0.154          | 0.074           | 0.228           | -0.167          | 0.109           | 0.276           | 0.8000 |
| 0.9000                   | -0.096          | 0.058           | 0.155           | -0.095          | 0.061           | 0.155           | -0.100          | 0.064           | 0.163           |                 |                 |                 | -0.134          | 0.067           | 0.201           | -0.149          | 0.065           | 0.214           | -0.166          | 0.110           | 0.2             |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Concluded

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 2.233      α = 12.19 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.183          | 0.372           | 0.555           | -0.172          | 0.355           | 0.527           | -0.181          | 0.351           | 0.533           | -0.181          | 0.330           | 0.511           | -0.207          | 0.346           | 0.553           | -0.174          | 0.330           | 0.503           | -0.157          | 0.303           |                 | 0.0000 |
| 0.0125                   | -0.175          | 0.353           | 0.528           | -0.175          | 0.333           | 0.508           | -0.181          | 0.325           | 0.505           | -0.181          | 0.315           | 0.499           | -0.184          | 0.339           | 0.523           | -0.171          | 0.332           | 0.503           | -0.178          |                 |                 | 0.0125 |
| 0.0250                   | -0.169          | 0.333           | 0.503           | -0.177          | 0.312           | 0.489           | -0.180          | 0.305           | 0.485           | -0.184          | 0.315           | 0.499           | -0.172          | 0.329           | 0.501           | -0.172          | 0.329           |                 | -0.189          | 0.313           |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.167          | 0.292           | 0.459           | -0.179          | 0.274           | 0.453           | -0.180          | 0.285           | 0.465           |                 | 0.286           |                 | -0.178          | 0.302           | 0.480           | -0.169          | 0.310           | 0.479           | -0.184          | 0.307           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.172          | 0.256           | 0.427           | -0.177          | 0.254           | 0.431           | -0.178          | 0.266           | 0.444           | -0.176          |                 |                 | -0.180          | 0.295           | 0.475           | -0.170          | 0.292           | 0.462           | -0.185          | 0.307           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.172          | 0.241           | 0.413           | -0.175          | 0.231           | 0.406           | -0.178          | 0.250           | 0.428           | -0.175          | 0.253           | 0.428           | -0.181          | 0.274           | 0.455           | -0.171          | 0.280           | 0.450           | -0.182          | 0.297           |                 | 0.1000 |
| 0.1500                   | -0.170          | 0.216           | 0.385           | -0.174          | 0.211           | 0.384           | -0.178          | 0.230           | 0.408           | -0.174          | 0.231           | 0.405           | -0.179          | 0.256           | 0.435           | -0.182          | 0.259           | 0.441           | -0.180          | 0.275           | 0.455           | 0.1500 |
| 0.2000                   | -0.160          | 0.190           | 0.350           | -0.171          | 0.206           | 0.378           | -0.178          | 0.258           | 0.436           | -0.176          |                 |                 | -0.176          | 0.217           | 0.394           | -0.168          | 0.242           | 0.410           | -0.192          | 0.265           | 0.457           | 0.2000 |
| 0.3000                   | -0.122          | 0.171           | 0.293           | -0.168          | 0.188           | 0.356           | -0.178          | 0.180           | 0.358           |                 |                 |                 | -0.178          | 0.197           | 0.375           | -0.180          | 0.216           | 0.396           | -0.169          | 0.248           | 0.417           | 0.3000 |
| 0.4000                   | -0.114          | 0.162           | 0.277           | -0.151          | 0.168           | 0.319           | -0.174          | 0.169           | 0.343           |                 |                 |                 | -0.174          | 0.186           | 0.360           | -0.177          | 0.198           | 0.375           | -0.188          | 0.231           | 0.419           | 0.4000 |
| 0.5000                   | -0.112          | 0.148           | 0.260           | -0.126          | 0.146           | 0.272           | -0.168          | 0.151           | 0.319           |                 |                 |                 | -0.173          | 0.163           | 0.336           | -0.182          | 0.181           | 0.363           | -0.191          | 0.220           | 0.411           | 0.5000 |
| 0.6000                   |                 | 0.131           |                 | -0.110          | 0.134           | 0.245           | -0.161          | 0.142           | 0.302           |                 |                 |                 | -0.170          | 0.153           | 0.323           | -0.184          | 0.166           | 0.350           | -0.192          | 0.201           | 0.393           | 0.6000 |
| 0.7000                   | -0.058          |                 |                 | -0.111          | 0.133           | 0.244           | -0.146          | 0.138           | 0.284           |                 |                 |                 | -0.166          | 0.143           | 0.309           | -0.180          | 0.154           | 0.334           | -0.188          | 0.193           | 0.381           | 0.7000 |
| 0.8000                   | -0.105          | 0.113           | 0.218           | -0.114          | 0.124           | 0.238           | -0.126          | 0.133           | 0.259           |                 |                 |                 | -0.162          | 0.134           | 0.297           | -0.179          | 0.142           | 0.322           | -0.185          | 0.183           | 0.368           | 0.8000 |
| 0.9000                   | -0.113          | 0.119           | 0.232           | -0.111          | 0.125           | 0.235           | -0.121          | 0.124           | 0.245           |                 |                 |                 | -0.160          | 0.133           | 0.293           | -0.177          | 0.131           | 0.308           | -0.183          | 0.180           | 0.363           | 0.9000 |
| 1.0000                   | -0.084          | 0.136           | 0.220           | -0.101          | 0.135           | 0.236           | -0.130          | 0.111           | 0.242           |                 |                 |                 | -0.159          | 0.140           | 0.300           | -0.173          | 0.121           | 0.295           | -0.181          | 0.185           | 0.366           | 1.0000 |
| M = 2.227      α = 16.22 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.200          | 0.380           | 0.580           | -0.186          | 0.370           | 0.556           | -0.194          | 0.366           | 0.559           |                 |                 |                 | -0.188          | 0.372           | 0.561           | -0.182          | 0.344           | 0.526           | -0.166          | 0.327           |                 | 0.0000 |
| 0.0125                   | -0.193          | 0.407           | 0.599           | -0.190          | 0.371           | 0.562           | -0.195          | 0.370           | 0.565           | -0.190          | 0.372           | 0.562           | -0.198          | 0.380           | 0.578           | -0.180          | 0.375           | 0.555           | -0.186          |                 |                 | 0.0125 |
| 0.0250                   | -0.188          | 0.414           | 0.602           | -0.193          | 0.367           | 0.559           | -0.195          | 0.368           | 0.564           | -0.192          | 0.383           | 0.574           | -0.200          | 0.382           | 0.583           |                 | 0.375           | 0.555           | -0.186          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.186          | 0.371           | 0.557           | -0.194          | 0.339           | 0.533           | -0.195          | 0.348           | 0.544           |                 | 0.366           |                 | -0.183          | 0.374           | 0.557           | -0.178          | 0.387           | 0.565           | -0.191          | 0.376           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.189          | 0.333           | 0.522           | -0.192          | 0.326           | 0.518           | -0.194          | 0.333           | 0.527           | -0.186          |                 |                 | -0.194          | 0.357           | 0.551           | -0.179          | 0.375           | 0.554           | -0.191          | 0.381           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.190          | 0.316           | 0.506           | -0.190          | 0.307           | 0.497           | -0.194          | 0.328           | 0.522           | -0.186          | 0.330           | 0.516           | -0.196          | 0.342           | 0.538           | -0.179          | 0.365           | 0.544           | -0.190          | 0.371           | 0.561           | 0.1000 |
| 0.1500                   | -0.189          | 0.286           | 0.475           | -0.189          | 0.296           | 0.485           | -0.196          | 0.305           | 0.501           | -0.186          | 0.311           | 0.498           | -0.196          | 0.327           | 0.523           | -0.192          | 0.345           | 0.537           | -0.189          | 0.360           | 0.549           | 0.1500 |
| 0.2000                   | -0.181          | 0.264           | 0.444           | -0.188          | 0.291           | 0.479           | -0.196          | 0.324           | 0.519           | -0.187          |                 |                 | -0.194          | 0.312           | 0.506           | -0.177          | 0.324           | 0.501           | -0.200          | 0.353           | 0.553           | 0.2000 |
| 0.3000                   | -0.151          | 0.252           | 0.403           | -0.185          | 0.271           | 0.456           | -0.193          | 0.273           | 0.466           |                 |                 |                 | -0.197          | 0.289           | 0.487           | -0.191          | 0.294           | 0.485           | -0.176          | 0.333           | 0.509           | 0.3000 |
| 0.4000                   | -0.141          | 0.242           | 0.383           | -0.177          | 0.244           | 0.421           | -0.190          | 0.242           | 0.433           |                 |                 |                 | -0.195          | 0.275           | 0.470           | -0.187          | 0.276           | 0.464           | -0.197          | 0.310           | 0.508           | 0.4000 |
| 0.5000                   | -0.132          | 0.214           | 0.347           | -0.158          | 0.219           | 0.377           | -0.187          | 0.230           | 0.417           |                 |                 |                 | -0.193          | 0.261           | 0.453           | -0.193          | 0.259           | 0.452           | -0.200          | 0.296           | 0.496           | 0.5000 |
| 0.6000                   |                 | 0.215           |                 | -0.144          | 0.214           | 0.358           | -0.183          | 0.218           | 0.401           |                 |                 |                 | -0.192          | 0.227           | 0.419           | -0.196          | 0.244           | 0.439           | -0.200          | 0.277           | 0.477           | 0.6000 |
| 0.7000                   | -0.074          |                 |                 | -0.142          | 0.202           | 0.344           | -0.172          | 0.210           | 0.382           |                 |                 |                 | -0.186          | 0.223           | 0.409           | -0.193          | 0.235           | 0.428           | -0.197          | 0.269           | 0.467           | 0.7000 |
| 0.8000                   | -0.126          | 0.182           | 0.308           | -0.139          | 0.197           | 0.336           | -0.165          | 0.205           | 0.370           |                 |                 |                 | -0.184          | 0.214           | 0.397           | -0.194          | 0.222           | 0.416           | -0.194          | 0.261           | 0.455           | 0.8000 |
| 0.9000                   | -0.139          | 0.189           | 0.329           | -0.134          | 0.195           | 0.328           | -0.159          | 0.195           | 0.354           |                 |                 |                 | -0.171          | 0.203           | 0.374           | -0.192          | 0.212           | 0.404           | -0.192          | 0.264           | 0.455           | 0.9000 |
| 1.0000                   | -0.113          | 0.213           | 0.326           | -0.126          | 0.195           | 0.321           | -0.154          | 0.180           | 0.334           |                 |                 |                 | -0.149          | 0.191           | 0.340           | -0.188          | 0.203           | 0.392           | -0.191          | 0.277           | 0.468           | 1.0000 |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$

| x/c                        | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                            | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.700      α = -0.4.28 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                     | -0.033          | -0.092          | -0.058          | 0.032           | -0.177          | -0.209          | 0.082           | -0.313          | -0.395          |                 |                 |                 | 0.180           | -0.472          | -0.652          | 0.180           | -0.644          | -0.824          | 0.143           | -0.550          |                 | 0.0000 |
| 0.0125                     | 0.009           | -0.104          | -0.113          | 0.018           | -0.175          | -0.193          | 0.054           | -0.267          | -0.321          | 0.086           | -0.432          | -0.518          | 0.128           | -0.593          | -0.720          | 0.160           | -0.640          | -0.800          | 0.153           |                 |                 | 0.0125 |
| 0.0250                     | 0.027           | -0.114          | -0.141          | 0.007           | -0.174          | -0.180          | 0.031           | -0.236          | -0.268          | 0.076           | -0.338          | -0.414          | 0.090           | -0.605          | -0.694          |                 | -0.637          |                 | 0.153           |                 |                 | 0.0250 |
| 0.0420                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.557          |                 | 0.0420 |
| 0.0500                     | -0.008          | -0.130          | -0.122          | -0.009          | -0.176          | -0.167          | 0.007           | -0.220          | -0.227          |                 | -0.272          |                 | 0.055           | -0.303          | -0.358          | 0.113           | -0.638          | -0.751          | 0.126           |                 |                 | 0.0500 |
| 0.0640                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.556          |                 | 0.0640 |
| 0.0750                     | -0.026          | -0.146          | -0.120          | -0.017          | -0.182          | -0.165          | 0.001           | -0.214          | -0.214          | 0.012           |                 |                 | 0.032           | -0.269          | -0.301          | 0.091           | -0.656          | -0.747          | 0.108           |                 |                 | 0.0750 |
| 0.0810                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.553          |                 | 0.0810 |
| 0.1000                     | -0.027          | -0.153          | -0.126          | -0.023          | -0.186          | -0.164          | -0.007          | -0.211          | -0.204          | 0.004           | -0.242          | -0.246          | 0.017           | -0.258          | -0.275          | 0.071           | -0.682          | -0.753          | 0.092           | -0.554          | -0.646          | 0.1000 |
| 0.1500                     | -0.032          | -0.156          | -0.124          | -0.024          | -0.190          | -0.165          | -0.013          | -0.216          | -0.202          | -0.004          | -0.237          | -0.232          | 0.001           | -0.243          | -0.244          | 0.056           | -0.649          | -0.704          | 0.077           | -0.557          | -0.634          | 0.1500 |
| 0.2000                     | -0.032          | -0.173          | -0.140          | -0.024          | -0.192          | -0.168          | -0.011          | -0.210          | -0.199          | -0.014          |                 |                 | -0.001          | -0.232          | -0.231          | 0.040           | -0.458          | -0.498          | 0.060           | -0.561          | -0.621          | 0.2000 |
| 0.3000                     | -0.036          | -0.191          | -0.155          | -0.032          | -0.202          | -0.170          | -0.028          | -0.211          | -0.183          |                 |                 |                 | -0.014          | -0.214          | -0.200          | 0.028           | -0.187          | -0.215          | 0.031           | -0.579          | -0.611          | 0.3000 |
| 0.4000                     | -0.036          | -0.200          | -0.164          | -0.035          | -0.201          | -0.167          | -0.029          | -0.206          | -0.177          |                 |                 |                 | -0.017          | -0.197          | -0.180          | 0.020           | -0.192          | -0.212          | 0.009           | -0.586          | -0.595          | 0.4000 |
| 0.5000                     | -0.038          | -0.200          | -0.162          | -0.033          | -0.197          | -0.164          | -0.024          | -0.194          | -0.170          |                 |                 |                 | -0.010          | -0.184          | -0.173          | -0.011          | -0.181          | -0.170          | -0.006          | -0.556          | -0.549          | 0.5000 |
| 0.6000                     |                 | -0.182          |                 | -0.027          | -0.183          | -0.156          | -0.022          | -0.175          | -0.153          |                 |                 |                 | 0.012           | -0.164          | -0.176          | -0.041          | -0.165          | -0.124          | -0.017          | -0.485          | -0.468          | 0.6000 |
| 0.7000                     | -0.030          |                 |                 | -0.029          | -0.165          | -0.136          | -0.021          | -0.148          | -0.128          |                 |                 |                 | -0.013          | -0.140          | -0.127          | -0.063          | -0.148          | -0.085          | -0.023          | -0.358          | -0.335          | 0.7000 |
| 0.8000                     | -0.033          | -0.126          | -0.093          | -0.037          | -0.133          | -0.096          | -0.038          | -0.121          | -0.084          |                 |                 |                 | -0.044          | -0.107          | -0.064          | -0.067          | -0.119          | -0.052          | -0.031          | -0.201          | -0.170          | 0.8000 |
| 0.9000                     | -0.038          | -0.081          | -0.043          | -0.036          | -0.079          | -0.043          | -0.033          | -0.075          | -0.042          |                 |                 |                 | -0.025          | -0.057          | -0.032          | -0.050          | -0.078          | -0.028          | -0.042          | -0.072          | -0.030          | 0.9000 |
| 1.0000                     | -0.044          | -0.025          | 0.019           | -0.026          | -0.004          | 0.023           | -0.005          | -0.010          | -0.005          |                 |                 |                 | 0.043           | 0.010           | -0.033          | -0.012          | -0.026          | -0.013          | -0.056          | 0.030           | 0.086           | 1.0000 |
| M = 0.698      α = -0.0.15 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                     | 0.020           | -0.020          | -0.040          | -0.062          | -0.060          | 0.002           | -0.089          | -0.008          | 0.081           |                 |                 |                 | -0.066          | -0.037          | 0.028           | -0.087          | -0.031          | 0.056           | -0.024          | -0.056          |                 | 0.0000 |
| 0.0125                     | -0.024          | -0.021          | 0.003           | -0.082          | -0.050          | 0.032           | -0.097          | -0.044          | 0.053           | -0.095          | -0.057          | 0.038           | -0.097          | -0.064          | 0.033           | -0.096          | -0.066          | 0.030           | -0.074          |                 |                 | 0.0125 |
| 0.0250                     | -0.055          | -0.029          | 0.026           | -0.095          | -0.049          | 0.046           | -0.104          | -0.070          | 0.034           | -0.120          | -0.079          | 0.041           | -0.117          | -0.085          | 0.032           |                 | -0.093          |                 | -0.108          |                 |                 | 0.0250 |
| 0.0420                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.116          |                 | 0.0420 |
| 0.0500                     | -0.077          | -0.062          | 0.015           | -0.101          | -0.073          | 0.027           | -0.115          | -0.091          | 0.024           |                 | -0.107          |                 | -0.125          | -0.108          | 0.017           | -0.119          | -0.119          | 0.000           | -0.124          |                 |                 | 0.0500 |
| 0.0640                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.127          |                 | 0.0640 |
| 0.0750                     | -0.092          | -0.076          | 0.016           | -0.104          | -0.085          | 0.019           | -0.113          | -0.100          | 0.013           | -0.125          |                 |                 | -0.130          | -0.109          | 0.022           | -0.130          | -0.122          | 0.007           | -0.129          |                 |                 | 0.0750 |
| 0.0810                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.125          |                 | 0.0810 |
| 0.1000                     | -0.096          | -0.083          | 0.014           | -0.110          | -0.093          | 0.017           | -0.115          | -0.105          | 0.010           | -0.135          | -0.117          | 0.018           | -0.135          | -0.112          | 0.023           | -0.133          | -0.125          | 0.008           | -0.128          | -0.123          | 0.005           | 0.1000 |
| 0.1500                     | -0.103          | -0.086          | 0.017           | -0.112          | -0.097          | 0.015           | -0.113          | -0.111          | 0.002           | -0.134          | -0.121          | 0.013           | -0.131          | -0.117          | 0.014           | -0.129          | -0.124          | 0.004           | -0.127          | -0.123          | 0.004           | 0.1500 |
| 0.2000                     | -0.109          | -0.094          | 0.015           | -0.109          | -0.098          | 0.011           | -0.109          | -0.097          | 0.012           | -0.130          |                 |                 | -0.125          | -0.119          | 0.007           | -0.125          | -0.128          | -0.003          | -0.124          | -0.125          | -0.001          | 0.2000 |
| 0.3000                     | -0.119          | -0.111          | 0.008           | -0.117          | -0.105          | 0.011           | -0.119          | -0.113          | 0.006           |                 |                 |                 | -0.118          | -0.114          | 0.004           | -0.114          | -0.125          | -0.011          | -0.119          | -0.123          | -0.003          | 0.3000 |
| 0.4000                     | -0.119          | -0.115          | 0.003           | -0.116          | -0.112          | 0.004           | -0.110          | -0.114          | 0.003           |                 |                 |                 | -0.105          | -0.107          | -0.003          | -0.083          | -0.118          | -0.035          | -0.118          | -0.115          | 0.003           | 0.4000 |
| 0.5000                     | -0.116          | -0.115          | 0.001           | -0.108          | -0.117          | -0.009          | -0.099          | -0.111          | -0.012          |                 |                 |                 | -0.091          | -0.104          | -0.014          | -0.066          | -0.100          | -0.034          | -0.112          | -0.105          | 0.006           | 0.5000 |
| 0.6000                     |                 | -0.110          |                 | -0.097          | -0.111          | -0.014          | -0.090          | -0.104          | -0.014          |                 |                 |                 | -0.062          | -0.098          | -0.036          | -0.085          | -0.098          | -0.013          | -0.096          | -0.100          | -0.003          | 0.6000 |
| 0.7000                     | -0.092          |                 |                 | -0.093          | -0.103          | -0.010          | -0.089          | -0.092          | -0.002          |                 |                 |                 | -0.101          | -0.088          | 0.013           | -0.090          | -0.087          | 0.003           | -0.084          | -0.087          | -0.002          | 0.7000 |
| 0.8000                     | -0.100          | -0.088          | 0.012           | -0.097          | -0.088          | 0.009           | -0.103          | -0.078          | 0.025           |                 |                 |                 | -0.121          | -0.070          | 0.051           | -0.080          | -0.077          | 0.003           | -0.067          | -0.071          | -0.004          | 0.8000 |
| 0.9000                     | -0.087          | -0.059          | 0.029           | -0.089          | -0.059          | 0.030           | -0.080          | -0.046          | 0.033           |                 |                 |                 | -0.073          | -0.035          | 0.037           | -0.051          | -0.046          | 0.005           | -0.051          | -0.031          | 0.019           | 0.9000 |
| 1.0000                     | -0.054          | -0.018          | 0.036           | -0.068          | -0.016          | 0.052           | -0.019          | 0.002           | 0.021           |                 |                 |                 | 0.043           | 0.016           | -0.027          | -0.004          | 0.005           | 0.009           | -0.035          | 0.034           | 0.069           | 1.0000 |
| M = 0.696      α = 0.3.68  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                     | -0.127          | 0.117           | 0.244           | -0.265          | -0.065          | 0.200           | -0.514          | 0.148           | 0.662           |                 |                 |                 | -0.525          | 0.192           | 0.717           | -0.649          | 0.166           | 0.814           | -0.518          | 0.092           |                 | 0.0000 |
| 0.0125                     | -0.133          | 0.084           | 0.217           | -0.232          | 0.018           | 0.250           | -0.350          | 0.103           | 0.453           | -0.573          | 0.129           | 0.702           | -0.631          | 0.154           | 0.785           | -0.645          | 0.172           | 0.817           | -0.523          |                 |                 | 0.0125 |
| 0.0250                     | -0.139          | 0.058           | 0.197           | -0.209          | 0.061           | 0.271           | -0.248          | 0.070           | 0.318           | -0.306          | 0.097           | 0.403           | -0.634          | 0.123           | 0.757           |                 | 0.169           |                 | -0.525          |                 |                 | 0.0250 |
| 0.0420                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.153           |                 | 0.0420 |
| 0.0500                     | -0.154          | 0.025           | 0.178           | -0.195          | 0.032           | 0.227           | -0.225          | 0.044           | 0.269           |                 | 0.064           |                 | -0.329          | 0.086           | 0.415           | -0.645          | 0.133           | 0.777           | -0.525          |                 |                 | 0.0500 |
| 0.0640                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.147           |                 | 0.0640 |
| 0.0750                     | -0.151          | 0.018           | 0.169           | -0.188          | 0.020           | 0.208           | -0.215          | 0.031           | 0.246           | -0.266          |                 |                 | -0.281          | 0.064           | 0.345           | -0.655          | 0.092           | 0.746           | -0.525          |                 |                 | 0.0750 |
| 0.0810                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.124           |                 | 0.0810 |
| 0.1000                     | -0.159          | 0.013           | 0.171           | -0.186          | 0.012           | 0.197           | -0.218          | 0.022           | 0.240           | -0.258          | 0.034           | 0.293           | -0.264          | 0.048           | 0.312           | -0.664          | 0.079           | 0.742           | -0.525          | 0.119           | 0.644           | 0.1000 |
| 0.1500                     | -0.165          | 0.010           | 0.176           | -0.183          | 0.009           | 0.193           | -0.207          | 0.011           | 0.218           | -0.247          | 0.016           | 0.264           | -0.242          | 0.028           | 0.270           | -0.653          | 0.058           | 0.711           | -0.524          | 0.102           | 0.627           | 0.1500 |
| 0.2000                     | -0.169          | 0.007           | 0.176           | -0.186          | 0.009           | 0.195           | -0.199          | 0.019           | 0.218           | -0.232          |                 |                 | -0.222          | 0.022           | 0.245           | -0.453          | 0.046           | 0.499           | -0.527          | 0.082           | 0.609           | 0.2000 |
| 0.3000                     | -0.190          | -0.008          | 0.183           | -0.192          | 0.002           | 0.194           | -0.197          | -0.005          | 0.192           |                 |                 |                 | -0.198          | 0.004           | 0.202           | -0.147          | 0.015           | 0.162           | -0.534          | 0.051           | 0.585           | 0.3000 |
| 0.4000                     | -0.181          | -0.016          | 0.165           | -0.185          | -0.011          | 0.174           | -0.181          | -0.016          | 0.165           |                 |                 |                 | -0.178          | -0.002          | 0.176           | -0.113          | 0.003           | 0.116           | -0.554          | 0.031           | 0.585           | 0.4000 |
| 0.5000                     | -0.171          | -0.021          | 0.149           | -0.170          | -0.021          | 0.149           | -0.160          | -0.022          | 0.138           |                 |                 |                 | -0.151          | -0.011          | 0.140           | -0.119          | -0.001          | 0.118           | -0.528          | 0.017           | 0.545           | 0.5000 |
| 0.6000                     |                 | -0.027          |                 | -0.149          | -0.025          | 0.124           | -0.143          | -0.025          | 0.118           |                 |                 |                 | -0.115          | -0.017          | 0.098           | -0.121          | -0.009          | 0.112           | -0.448          | 0.005           | 0.453           | 0.6000 |
| 0.7000                     | -0.135          |                 |                 | -0.135          | -0.030          | 0.105           | -0.133          | -0.024          | 0.109           |                 |                 |                 | -0.145          | -0.019          | 0.126           | -0.118          | -0.014          | 0.103           | -0.345          | -0.003          | 0.342           | 0.7000 |
| 0.8000                     | -0.129          | -0.025          | 0.104           | -0.128          | -0.029          | 0.099           | -0.137          | -0.024          | 0.113           |                 |                 |                 | -0.152          | -0.014          | 0.138           | -0.101          | -0.017          | 0.084           | -0.228          | -0.005          | 0.223           | 0.8000 |
| 0.9000                     | -0.094          | -0.024          | 0.071           | -0.111          | -0.012          | 0.098           | -0.097          | -0.010          | 0.087           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.695      α = 07.85 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.507          | 0.192           | 0.699           | -1.425          | 0.168           | 1.593           | -0.551          | 0.154           | 0.705           | -0.903          | 0.116           | 1.020           | -0.813          | -0.030          | 0.783           | -0.685          | 0.132           |                 |                 |                 | 0.0000          |        |
| 0.0125                   | -0.381          | 0.188           | 0.569           | -0.755          | 0.175           | 0.930           | -0.905          | 0.173           | 1.078           | -0.930          | 0.156           | 1.086           | -0.907          | 0.174           | 1.080           | -0.810          | 0.112           | 0.922           | -0.662          |                 | 0.0125          |        |
| 0.0250                   | -0.304          | 0.180           | 0.485           | -0.351          | 0.175           | 0.526           | -1.009          | 0.182           | 1.192           | -0.957          | 0.191           | 1.148           | -0.935          | 0.207           | 1.142           | -0.935          | 0.198           |                 | -0.648          |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.301          | 0.150           | 0.452           | -0.339          | 0.158           | 0.497           | -0.471          | 0.168           | 0.640           | -1.068          | 0.201           | 1.269           | -0.811          | 0.202           | 1.013           | -0.649          | 0.199           |                 |                 |                 | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.276          | 0.133           | 0.410           | -0.326          | 0.142           | 0.469           | -0.315          | 0.152           | 0.468           | -0.895          |                 |                 | -1.281          | 0.188           | 1.469           | -0.818          | 0.208           | 1.027           | -0.654          | 0.210           | 0.0750          |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.266          | 0.123           | 0.389           | -0.324          | 0.136           | 0.459           | -0.337          | 0.145           | 0.482           | -0.298          | 0.162           | 0.460           | -1.226          | 0.170           | 1.396           | -0.843          | 0.192           | 1.035           | -0.653          | 0.203           | 0.1000          |        |
| 0.1500                   | -0.281          | 0.117           | 0.399           | -0.320          | 0.125           | 0.445           | -0.329          | 0.130           | 0.459           | -0.311          | 0.141           | 0.452           | -0.407          | 0.148           | 0.554           | -0.870          | 0.167           | 1.037           | -0.651          | 0.190           | 0.1500          |        |
| 0.2000                   | -0.285          | 0.104           | 0.390           | -0.312          | 0.116           | 0.429           | -0.315          | 0.125           | 0.440           | -0.320          |                 |                 | -0.273          | 0.130           | 0.403           | -0.956          | 0.150           | 1.105           | -0.650          | 0.177           | 0.2000          |        |
| 0.3000                   | -0.310          | 0.086           | 0.396           | -0.306          | 0.096           | 0.402           | -0.308          | 0.094           | 0.402           |                 |                 |                 | -0.273          | 0.104           | 0.377           | -1.227          | 0.123           | 1.349           | -0.669          | 0.148           | 0.3000          |        |
| 0.4000                   | -0.287          | 0.074           | 0.360           | -0.286          | 0.086           | 0.372           | -0.279          | 0.077           | 0.357           |                 |                 |                 | -0.253          | 0.088           | 0.341           | -0.936          | 0.100           | 1.036           | -0.664          | 0.119           | 0.4000          |        |
| 0.5000                   | -0.260          | 0.064           | 0.324           | -0.249          | 0.070           | 0.319           | -0.243          | 0.062           | 0.305           |                 |                 |                 | -0.215          | 0.069           | 0.284           | -0.439          | 0.081           | 0.520           | -0.628          | 0.101           | 0.5000          |        |
| 0.6000                   |                 | 0.049           |                 | -0.212          | 0.051           | 0.264           | -0.203          | 0.047           | 0.250           |                 |                 |                 | -0.147          | 0.055           | 0.202           | -0.186          | 0.059           | 0.245           | -0.604          | 0.064           | 0.6000          |        |
| 0.7000                   | -0.177          |                 |                 | -0.179          | 0.039           | 0.218           | -0.160          | 0.037           | 0.197           |                 |                 |                 | -0.137          | 0.039           | 0.177           | -0.100          | 0.051           | 0.151           | -0.637          | 0.040           | 0.7000          |        |
| 0.8000                   | -0.153          | 0.022           | 0.175           | -0.149          | 0.027           | 0.176           | -0.142          | 0.027           | 0.169           |                 |                 |                 | -0.146          | 0.033           | 0.179           | -0.057          | 0.035           | 0.092           | -0.717          | 0.006           | 0.8000          |        |
| 0.9000                   | -0.101          | 0.019           | 0.120           | -0.101          | 0.028           | 0.129           | -0.097          | 0.025           | 0.122           |                 |                 |                 | -0.083          | 0.035           | 0.118           | -0.014          | 0.029           | 0.043           | -0.723          | -0.049          | 0.674           | 0.9000 |
| 1.0000                   | -0.021          | 0.023           | 0.044           | -0.037          | 0.041           | 0.078           | -0.023          | 0.032           | 0.055           |                 |                 |                 | -0.054          | 0.046           | -0.007          | 0.028           | 0.033           | 0.005           | -0.656          | -0.126          | 0.529           | 1.0000 |
| M = 0.700      α = 11.79 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.636          | 0.212           | 1.848           | -0.741          | 0.120           | 0.861           | -1.054          | 0.013           | 1.066           | -1.203          | -0.093          | 1.110           | -1.043          | -0.199          | 0.843           | -0.952          | -0.031          |                 |                 |                 | 0.0000          |        |
| 0.0125                   | -0.950          | 0.242           | 1.191           | -1.274          | 0.182           | 1.456           | -1.209          | 0.133           | 1.342           | -1.253          | 0.061           | 1.314           | -1.216          | 0.078           | 1.293           | -1.036          | -0.004          | 1.033           | -0.953          |                 | 0.0125          |        |
| 0.0250                   | -0.528          | 0.257           | 0.786           | -1.465          | 0.221           | 1.686           | -1.332          | 0.208           | 1.539           | -1.253          | 0.194           | 1.447           | -1.229          | 0.187           | 1.416           |                 | 0.126           |                 | -0.955          |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.480          | 0.247           | 0.728           | -0.820          | 0.228           | 1.048           | -1.477          | 0.223           | 1.700           |                 | 0.228           |                 | -1.259          | 0.224           | 1.483           | -1.034          | 0.190           | 1.224           | -0.959          | 0.116           | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.454          | 0.228           | 0.682           | -0.429          | 0.228           | 0.657           | -1.375          | 0.217           | 1.592           | -1.392          |                 |                 | -1.287          | 0.233           | 1.519           | -1.045          | 0.215           | 1.259           | -0.964          | 0.156           | 0.0750          |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.450          | 0.214           | 0.664           | -0.451          | 0.217           | 0.668           | -0.771          | 0.212           | 0.983           | -1.492          | 0.222           | 1.714           | -1.337          | 0.225           | 1.562           | -1.058          | 0.218           | 1.276           | -0.963          | 0.178           | 0.1000          |        |
| 0.1500                   | -0.464          | 0.200           | 0.664           | -0.469          | 0.198           | 0.667           | -0.493          | 0.193           | 0.686           | -1.036          | 0.206           | 1.243           | -1.687          | 0.204           | 1.891           | -1.092          | 0.212           | 1.303           | -0.957          | 0.186           | 0.1500          |        |
| 0.2000                   | -0.459          | 0.184           | 0.644           | -0.472          | 0.191           | 0.662           | -0.463          | 0.186           | 0.649           | -0.561          |                 |                 | -1.205          | 0.187           | 1.392           | -1.076          | 0.193           | 1.269           | -0.946          | 0.186           | 0.2000          |        |
| 0.3000                   | -0.468          | 0.159           | 0.627           | -0.456          | 0.161           | 0.617           | -0.449          | 0.155           | 0.603           |                 |                 |                 | -0.489          | 0.160           | 0.648           | -1.055          | 0.175           | 1.229           | -0.928          | 0.165           | 0.3000          |        |
| 0.4000                   | -0.433          | 0.131           | 0.564           | -0.420          | 0.140           | 0.560           | -0.409          | 0.131           | 0.540           |                 |                 |                 | -0.377          | 0.138           | 0.515           | -1.621          | 0.143           | 1.764           | -0.921          | 0.144           | 0.4000          |        |
| 0.5000                   | -0.393          | 0.117           | 0.510           | -0.378          | 0.119           | 0.497           | -0.354          | 0.109           | 0.463           |                 |                 |                 | -0.309          | 0.112           | 0.421           | -1.454          | 0.118           | 1.572           | -0.874          | 0.110           | 0.5000          |        |
| 0.6000                   |                 | 0.093           |                 | -0.312          | 0.096           | 0.408           | -0.278          | 0.088           | 0.366           |                 |                 |                 | -0.146          | 0.090           | 0.236           | -0.752          | 0.096           | 0.848           | -0.815          | 0.076           | 0.6000          |        |
| 0.7000                   | -0.226          |                 | 0.048           | -0.250          | 0.073           | 0.322           | -0.177          | 0.070           | 0.246           |                 |                 |                 | -0.063          | 0.069           | 0.132           | -0.369          | 0.075           | 0.444           | -0.717          | 0.037           | 0.7000          |        |
| 0.8000                   | -0.160          | 0.048           | 0.208           | -0.151          | 0.057           | 0.207           | -0.146          | 0.046           | 0.192           |                 |                 |                 | -0.129          | 0.049           | 0.178           | -0.100          | 0.045           | 0.146           | -0.640          | -0.018          | 0.8000          |        |
| 0.9000                   | -0.113          | 0.029           | 0.142           | -0.110          | 0.039           | 0.149           | -0.110          | 0.028           | 0.138           |                 |                 |                 | -0.096          | 0.033           | 0.130           | 0.038           | 0.014           | -0.024          | -0.580          | -0.107          | 0.473           | 0.9000 |
| 1.0000                   | -0.086          | 0.011           | 0.097           | -0.128          | 0.020           | 0.147           | -0.071          | 0.013           | 0.085           |                 |                 |                 | -0.036          | 0.022           | -0.013          | 0.048           | -0.018          | -0.066          | -0.538          | -0.231          | 0.307           | 1.0000 |
| M = 0.702      α = 15.91 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.020          | 0.231           | 1.250           | -1.397          | 0.012           | 1.409           | -1.518          | -0.152          | 1.367           | -1.391          | -0.265          | 1.126           | -1.110          | -0.355          | 0.755           | -0.405          | 0.026           |                 |                 |                 | 0.0000          |        |
| 0.0125                   | -1.707          | 0.313           | 2.020           | -1.549          | 0.182           | 1.732           | -1.504          | 0.083           | 1.587           | -1.428          | -0.022          | 1.407           | -1.396          | 0.002           | 0.998           | -0.413          |                 |                 |                 |                 | 0.0125          |        |
| 0.0250                   | -1.870          | 0.366           | 2.236           | -1.634          | 0.290           | 1.924           | -1.507          | 0.236           | 1.743           | -1.433          | 0.187           | 1.620           | -1.408          | 0.181           | 1.589           | -0.419          |                 |                 |                 |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.624          | 0.383           | 1.007           | -1.600          | 0.314           | 1.914           | -1.569          | 0.295           | 1.864           |                 | 0.256           |                 | -1.454          | 0.272           | 1.726           | -1.054          | 0.206           | 1.260           | -0.422          | 0.149           | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.622          | 0.369           | 0.991           | -1.588          | 0.329           | 1.917           | -1.760          | 0.306           | 2.066           | -1.547          |                 |                 | -1.499          | 0.299           | 1.799           | -1.043          | 0.262           | 1.305           | -0.432          | 0.180           | 0.0750          |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.615          | 0.351           | 0.966           | -0.975          | 0.326           | 1.301           | -1.957          | 0.308           | 2.265           | -1.565          | 0.296           | 1.861           | -1.465          | 0.300           | 1.766           | -1.033          | 0.264           | 1.297           | -0.444          | 0.193           | 0.1000          |        |
| 0.1500                   | -0.617          | 0.325           | 0.942           | -0.610          | 0.313           | 0.923           | -1.110          | 0.293           | 1.403           | -1.862          | 0.291           | 2.153           | -1.488          | 0.289           | 1.777           | -1.028          | 0.273           | 1.301           | -0.457          | 0.201           | 0.1500          |        |
| 0.2000                   | -0.590          | 0.301           | 0.891           | -0.581          | 0.294           | 0.875           | -0.715          | 0.284           | 0.999           | -1.297          |                 |                 | -1.878          | 0.275           | 2.153           | -0.891          | 0.268           | 1.158           | -0.482          | 0.197           | 0.2000          |        |
| 0.3000                   | -0.576          | 0.251           | 0.826           | -0.565          | 0.264           | 0.829           | -0.569          | 0.250           | 0.819           |                 |                 |                 | -1.065          | 0.245           | 1.310           | -0.718          | 0.235           | 0.953           | -0.533          | 0.158           | 0.3000          |        |
| 0.4000                   | -0.516          | 0.221           | 0.738           | -0.492          | 0.231           | 0.723           | -0.469          | 0.219           | 0.688           |                 |                 |                 | -0.594          | 0.216           | 0.810           | -0.532          | 0.196           | 0.728           | -0.565          | 0.142           | 0.4000          |        |
| 0.5000                   | -0.426          | 0.197           | 0.623           | -0.386          | 0.197           | 0.582           | -0.359          | 0.185           | 0.544           |                 |                 |                 | -0.346          | 0.181           | 0.527           | -0.778          | 0.171           | 0.949           | -0.599          | 0.102           | 0.5000          |        |
| 0.6000                   |                 | 0.164           |                 | -0.269          | 0.156           | 0.425           | -0.234          | 0.148           | 0.382           |                 |                 |                 | -0.039          | 0.140           | 0.180           | -0.784          | 0.111           | 0.896           | -0.609          | 0.057           | 0.6000          |        |
| 0.7000                   | -0.172          |                 |                 | -0.149          | 0.117           | 0.265           | -0.106          | 0.110           | 0.215           |                 |                 |                 | 0.099           | 0.096           | -0.002          | -0.669          | 0.080           | 0.749           | -0.612          | 0.005           | 0.7000          |        |
| 0.8000                   | -0.158          | 0.065           | 0.223           | -0.142          | 0.069           | 0.211           | -0.143          | 0.061           | 0.204           |                 |                 |                 | -0.143          | 0.048           | 0.191           | -0.597          | 0.015           | 0.612           | -0.596          | -0.059          | 0.537           | 0.8000 |
| 0.9000                   | -0.177          | 0.017           | 0.194           | -0.162          | 0.024           | 0.186           | -0.192          | 0.006           | 0.198           |                 |                 |                 | -0.196          | -0.010          | 0.185           | -0.591          | -0.077          | 0.514           | -0.578          | -0.142          | 0.436           | 0.9000 |
| 1.0000                   | -0.228          | -0.029          | 0.044           | -0.208          | 0.019           | 0.199           | -0.251          | -0.054          | 0.197           |                 |                 |                 | -0.058          | -0.079          | -0.020          | -0.651          | -0.194          | 0.457           | -0.558          | -0.245          | 0.313           | 1.0000 |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_w$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

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| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.905      α = 03.73 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.067          | 0.087           | 0.154           | -0.131          | 0.041           | 0.173           | -0.315          | 0.099           | 0.414           | -0.453          | 0.092           | 0.545           | -0.459          | 0.154           | 0.613           | -0.674          | 0.154           | 0.828           | -0.555          | 0.096           | 0.0000          |        |
| 0.0125                   | -0.107          | 0.053           | 0.161           | -0.166          | 0.032           | 0.198           | -0.273          | 0.056           | 0.330           | -0.412          | 0.055           | 0.567           | -0.553          | 0.112           | 0.665           | -0.672          | 0.133           | 0.805           | -0.552          |                 | 0.0125          |        |
| 0.0250                   | -0.133          | 0.027           | 0.160           | -0.186          | 0.020           | 0.206           | -0.247          | 0.026           | 0.273           | -0.412          | 0.055           | 0.467           | -0.567          | 0.078           | 0.646           |                 | 0.113           |                 | -0.551          |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.141          | -0.003          | 0.138           | -0.183          | -0.009          | 0.174           | -0.237          | 0.002           | 0.239           |                 | 0.035           |                 | -0.354          | 0.038           | 0.392           | -0.676          | 0.074           | 0.750           | -0.553          | 0.114           | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.108           | 0.0640          |        |
| 0.0750                   | -0.147          | -0.020          | 0.127           | -0.183          | -0.019          | 0.164           | -0.228          | -0.009          | 0.219           | -0.274          |                 |                 | -0.294          | 0.020           | 0.314           | -0.688          | 0.047           | 0.735           | -0.559          |                 | 0.0750          |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.096           | 0.0810          |        |
| 0.1000                   | -0.158          | -0.025          | 0.133           | -0.199          | -0.026          | 0.174           | -0.237          | -0.017          | 0.221           | -0.271          | 0.001           | 0.273           | -0.297          | 0.005           | 0.302           | -0.698          | 0.028           | 0.726           | -0.563          | 0.077           | 0.640           | 0.1000 |
| 0.1500                   | -0.183          | -0.027          | 0.156           | -0.213          | -0.029          | 0.184           | -0.236          | -0.027          | 0.208           | -0.260          | -0.014          | 0.246           | -0.290          | -0.012          | 0.278           | -0.700          | 0.008           | 0.709           | -0.565          | 0.058           | 0.623           | 0.1500 |
| 0.2000                   | -0.190          | -0.035          | 0.155           | -0.216          | -0.030          | 0.186           | -0.233          | -0.025          | 0.208           | -0.265          |                 |                 | -0.276          | -0.024          | 0.251           | -0.606          | -0.006          | 0.600           | -0.570          | 0.041           | 0.612           | 0.2000 |
| 0.3000                   | -0.234          | -0.042          | 0.192           | -0.240          | -0.039          | 0.201           | -0.258          | -0.040          | 0.218           |                 |                 |                 | -0.269          | -0.035          | 0.234           | -0.253          | -0.027          | 0.226           | -0.595          | 0.017           | 0.611           | 0.3000 |
| 0.4000                   | -0.243          | -0.056          | 0.186           | -0.250          | -0.052          | 0.198           | -0.252          | -0.054          | 0.198           |                 |                 |                 | -0.261          | -0.047          | 0.214           | -0.126          | -0.035          | 0.091           | -0.644          | -0.001          | 0.642           | 0.4000 |
| 0.5000                   | -0.246          | -0.062          | 0.184           | -0.249          | -0.064          | 0.185           | -0.246          | -0.061          | 0.185           |                 |                 |                 | -0.235          | -0.054          | 0.181           | -0.146          | -0.035          | 0.111           | -0.657          | -0.008          | 0.649           | 0.5000 |
| 0.6000                   |                 | -0.065          |                 | -0.220          | -0.069          | 0.151           | -0.211          | -0.062          | 0.149           |                 |                 |                 | -0.135          | -0.055          | 0.080           | -0.200          | -0.039          | 0.160           | -0.641          | -0.017          | 0.624           | 0.6000 |
| 0.7000                   | -0.185          |                 |                 | -0.184          | -0.067          | 0.117           | -0.178          | -0.060          | 0.118           |                 |                 |                 | -0.214          | -0.057          | 0.156           | -0.225          | -0.046          | 0.179           | -0.555          | -0.017          | 0.538           | 0.7000 |
| 0.8000                   | -0.209          | -0.064          | 0.145           | -0.215          | -0.063          | 0.153           | -0.241          | -0.058          | 0.183           |                 |                 |                 | -0.276          | -0.052          | 0.224           | -0.176          | -0.041          | 0.134           | -0.408          | -0.022          | 0.387           | 0.8000 |
| 0.9000                   | -0.175          | -0.050          | 0.125           | -0.174          | -0.042          | 0.132           | -0.173          | -0.038          | 0.135           |                 |                 |                 | -0.147          | -0.028          | 0.118           | -0.082          | -0.023          | 0.058           | -0.226          | -0.016          | 0.211           | 0.9000 |
| 1.0000                   | -0.085          | -0.027          | 0.058           | -0.061          | -0.006          | 0.055           | 0.026           | 0.001           | -0.025          |                 |                 |                 | 0.175           | 0.015           | -0.160          | 0.058           | 0.008           | -0.050          | -0.009          | 0.001           | 0.010           | 1.0000 |
| M = 0.955      α = 03.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.055          | 0.120           | 0.175           | -0.145          | 0.099           | 0.244           | -0.272          | 0.113           | 0.386           | -0.436          | 0.162           | 0.598           | -0.436          | 0.162           | 0.598           | -0.668          | 0.156           | 0.823           | -0.640          | 0.102           | 0.0000          |        |
| 0.0125                   | -0.077          | 0.079           | 0.156           | -0.158          | 0.055           | 0.213           | -0.233          | 0.069           | 0.302           | -0.414          | 0.101           | 0.515           | -0.514          | 0.115           | 0.629           | -0.660          | 0.127           | 0.786           | -0.638          |                 | 0.0125          |        |
| 0.0250                   | -0.094          | 0.048           | 0.142           | -0.164          | 0.027           | 0.190           | -0.211          | 0.037           | 0.248           | -0.419          | 0.081           | 0.501           | -0.419          | 0.081           | 0.501           | -0.605          | 0.103           |                 | -0.637          |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.114          | 0.011           | 0.125           | -0.156          | 0.014           | 0.170           | -0.220          | 0.012           | 0.232           |                 | 0.041           |                 | -0.349          | 0.044           | 0.392           | -0.661          | 0.075           | 0.736           | -0.636          | 0.073           | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.121          | 0.006           | 0.127           | -0.157          | -0.002          | 0.155           | -0.208          |                 | 0.208           | -0.257          |                 |                 | -0.287          | 0.021           | 0.308           | -0.683          | 0.047           | 0.730           | -0.636          |                 | 0.0750          |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.057           | 0.0810          |        |
| 0.1000                   | -0.134          | -0.010          | 0.123           | -0.174          | -0.012          | 0.163           | -0.221          | -0.009          | 0.212           | -0.259          | 0.003           | 0.262           | -0.272          | 0.005           | 0.277           | -0.687          | 0.024           | 0.711           | -0.635          | 0.049           | 0.684           | 0.1000 |
| 0.1500                   | -0.160          | -0.015          | 0.145           | -0.190          | -0.018          | 0.173           | -0.226          | -0.023          | 0.204           | -0.248          | -0.018          | 0.231           | -0.277          | -0.015          | 0.262           | -0.660          | -0.001          | 0.659           | -0.633          | 0.031           | 0.664           | 0.1500 |
| 0.2000                   | -0.164          | -0.020          | 0.144           | -0.206          | -0.022          | 0.184           | -0.212          | -0.021          | 0.191           | -0.256          |                 |                 | -0.270          | -0.028          | 0.242           | -0.572          | -0.018          | 0.554           | -0.633          | 0.011           | 0.644           | 0.2000 |
| 0.3000                   | -0.224          | -0.040          | 0.184           | -0.236          | -0.033          | 0.202           | -0.253          | -0.044          | 0.209           |                 |                 |                 | -0.274          | -0.043          | 0.231           | -0.303          | -0.046          | 0.258           | -0.646          | -0.018          | 0.628           | 0.3000 |
| 0.4000                   | -0.240          | -0.053          | 0.187           | -0.249          | -0.052          | 0.198           | -0.264          | -0.061          | 0.203           |                 |                 |                 | -0.273          | -0.063          | 0.210           | -0.273          | -0.063          | 0.210           | -0.702          | -0.035          | 0.667           | 0.4000 |
| 0.5000                   | -0.254          | -0.063          | 0.191           | -0.258          | -0.069          | 0.189           | -0.267          | -0.080          | 0.187           |                 |                 |                 | -0.279          | -0.076          | 0.203           | -0.188          | -0.063          | 0.125           | -0.733          | -0.044          | 0.689           | 0.5000 |
| 0.6000                   |                 | -0.082          |                 | -0.264          | -0.084          | 0.180           | -0.272          | -0.088          | 0.184           |                 |                 |                 | -0.246          | -0.081          | 0.165           | -0.213          | -0.075          | 0.138           | -0.747          | -0.050          | 0.697           | 0.6000 |
| 0.7000                   | -0.261          |                 |                 | -0.266          | -0.091          | 0.175           | -0.236          | -0.091          | 0.146           |                 |                 |                 | -0.236          | -0.092          | 0.144           | -0.244          | -0.081          | 0.163           | -0.742          | -0.046          | 0.696           | 0.7000 |
| 0.8000                   | -0.246          | -0.092          | 0.154           | -0.253          | -0.096          | 0.158           | -0.270          | -0.096          | 0.174           |                 |                 |                 | -0.314          | -0.091          | 0.223           | -0.291          | -0.077          | 0.213           | -0.565          | -0.038          | 0.527           | 0.8000 |
| 0.9000                   | -0.262          | -0.079          | 0.183           | -0.284          | -0.081          | 0.203           | -0.314          | -0.070          | 0.243           |                 |                 |                 | -0.336          | -0.058          | 0.278           | -0.254          | -0.046          | 0.208           | -0.287          | -0.021          | 0.265           | 0.9000 |
| 1.0000                   | -0.308          | -0.053          | 0.255           | -0.357          | -0.047          | 0.310           | -0.366          | -0.014          | 0.352           |                 |                 |                 | -0.299          | 0.008           | 0.308           | -0.135          | 0.013           | 0.148           | 0.094           | 0.003           | -0.090          | 1.0000 |
| M = 1.005      α = 03.88 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.046          | 0.114           | 0.161           | -0.137          | 0.095           | 0.232           | -0.224          | 0.134           | 0.358           | -0.334          | 0.219           | 0.553           | -0.334          | 0.219           | 0.553           | -0.581          | 0.175           | 0.757           | -0.617          | 0.124           | 0.0000          |        |
| 0.0125                   | -0.069          | 0.081           | 0.151           | -0.135          | 0.065           | 0.200           | -0.191          | 0.096           | 0.287           | -0.331          | 0.150           | 0.480           | -0.409          | 0.180           | 0.589           | -0.581          | 0.170           | 0.750           | -0.614          |                 | 0.0125          |        |
| 0.0250                   | -0.087          | 0.055           | 0.142           | -0.132          | 0.044           | 0.176           | -0.169          | 0.070           | 0.239           | -0.339          | 0.122           | 0.461           | -0.339          | 0.122           | 0.461           | -0.567          | 0.157           |                 | -0.613          |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.107          | 0.023           | 0.131           | -0.125          | 0.026           | 0.152           | -0.155          | 0.053           | 0.209           |                 | 0.096           |                 | -0.246          | 0.109           | 0.355           | -0.589          | 0.114           | 0.703           | -0.615          | 0.091           | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.100          | 0.011           | 0.111           | -0.121          | 0.025           | 0.146           | -0.140          | 0.050           | 0.189           | -0.169          |                 |                 | -0.200          | 0.092           | 0.292           | -0.602          | 0.081           | 0.683           | -0.617          |                 | 0.0750          |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.062           | 0.0810          |        |
| 0.1000                   | -0.104          | 0.006           | 0.110           | -0.123          | 0.022           | 0.145           | -0.142          | 0.050           | 0.192           | -0.168          | 0.070           | 0.238           | -0.191          | 0.075           | 0.266           | -0.605          | 0.060           | 0.665           | -0.618          | 0.051           | 0.669           | 0.1000 |
| 0.1500                   | -0.112          | 0.012           | 0.124           | -0.122          | 0.028           | 0.150           | -0.137          | 0.045           | 0.181           | -0.161          | 0.057           | 0.218           | -0.198          | 0.052           | 0.249           | -0.566          | 0.035           | 0.601           | -0.616          | 0.034           | 0.650           | 0.1500 |
| 0.2000                   | -0.106          | 0.022           | 0.128           | -0.121          | 0.043           | 0.163           | -0.132          | 0.053           | 0.185           | -0.169          |                 |                 | -0.193          | 0.035           | 0.228           | -0.485          | 0.012           | 0.497           | -0.616          | 0.018           | 0.634           | 0.2000 |
| 0.3000                   | -0.135          | 0.030           | 0.166           | -0.152          | 0.032           | 0.184           | -0.175          | 0.019           | 0.193           |                 |                 |                 | -0.204          | 0.010           | 0.214           | -0.264          | -0.019          | 0.246           | -0.631          | -0.012          | 0.619           | 0.3000 |
| 0.4000                   | -0.159          | 0.005           | 0.163           | -0.174          | 0.008           | 0.182           | -0.191          | -0.007          | 0.185           |                 |                 |                 | -0.216          | -0.017          | 0.199           | -0.253          | -0.041          | 0.212           | -0.666          | -0.035          | 0.631           | 0.4000 |
| 0.5000                   | -0.190          | -0.010          | 0.180           | -0.195          | -0.028          | 0.168           | -0.210          | -0.035          | 0.174           |                 |                 |                 | -0.230          | -0.041          | 0.188           | -0.179          | -0.051          | 0.128           | -0.680          | -0.054          | 0.625           | 0.5000 |
| 0.6000                   |                 | -0.042          |                 | -0.224          | -0.050          | 0.174           | -0.232          | -0.055          | 0.177           |                 |                 |                 | -0.225          | -0.057          | 0.167           | -0.197          | -0.064          | 0.133           | -0.694          | -0.070          | 0.623           | 0.6000 |
| 0.7000                   | -0.230          |                 |                 | -0.232          | -0.069          | 0.163           | -0.231          | -0.070          | 0.161           |                 |                 |                 | -0.214          | -0.076          | 0.137           | -0.234          | -0.080          | 0.153           | -0.672          | -0.076          | 0.596           | 0.7000 |
| 0.8000                   | -0.222          | -0.089          | 0.134           | -0.228          | -0.085          | 0.143           | -0.249          | -0.091          | 0.158           |                 |                 |                 | -0.295          | -0.093          | 0.202           | -0.281          | -0.104          | 0.177           | -0.519          | -0.087          | 0.432           | 0.8000 |
| 0.9000                   | -0.280          | -0.102          | 0.177           | -0.283          | -0.097          | 0.186           | -0.311          | -0.103          | 0.208           |                 |                 |                 | -0.347          | -0.098          | 0.249           | -0.279          | -0.108          | 0.171           | -0.             |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| x/c                       | 2y/b=0.200      |                 |                 | 2y/b=0.250      |                 |                 | 2y/b=0.300      |                 |                 | 2y/b=0.350      |                 |                 | 2y/b=0.400      |                 |                 | 2y/b=0.600      |                 |                 | 2y/b=0.800      |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.044      α = 03.88  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.016          | 0.148           | 0.164           | -0.135          | 0.118           | 0.253           | -0.262          | 0.134           | 0.396           |                 |                 |                 | -0.401          | 0.177           | 0.577           | -0.570          | 0.163           | 0.733           | -0.572          | 0.117           |                 | 0.0000 |
| 0.0125                    | -0.051          | 0.118           | 0.168           | -0.144          | 0.079           | 0.222           | -0.222          | 0.090           | 0.312           | -0.370          | 0.115           | 0.485           | -0.463          | 0.128           | 0.591           | -0.560          | 0.163           | 0.723           | -0.572          |                 |                 | 0.0125 |
| 0.0250                    | -0.076          | 0.092           | 0.167           | -0.148          | 0.050           | 0.198           | -0.195          | 0.059           | 0.254           | -0.347          | 0.079           | 0.426           | -0.471          | 0.092           | 0.562           |                 | 0.155           |                 | -0.573          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.097          | 0.052           | 0.149           | -0.139          | 0.028           | 0.166           | -0.185          | 0.032           | 0.217           |                 | 0.043           |                 | -0.323          | 0.054           | 0.377           | -0.552          | 0.118           | 0.670           | -0.576          | 0.105           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.102          | 0.020           | 0.122           | -0.142          | 0.018           | 0.160           | -0.172          | 0.016           | 0.188           | -0.230          |                 |                 | -0.254          | 0.030           | 0.284           | -0.565          | 0.087           | 0.652           | -0.576          | 0.093           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.113          | 0.011           | 0.124           | -0.145          | -0.002          | 0.143           | -0.192          | 0.006           | 0.199           | -0.219          | 0.010           | 0.229           | -0.251          | 0.011           | 0.262           | -0.561          | 0.061           | 0.622           | -0.580          | 0.081           | 0.647           | 0.1000 |
| 0.1500                    | -0.126          | 0.003           | 0.129           | -0.171          | -0.011          | 0.160           | -0.184          | -0.009          | 0.176           | -0.222          | -0.015          | 0.207           | -0.238          | -0.012          | 0.226           | -0.509          | 0.037           | 0.546           | -0.581          | 0.052           | 0.633           | 0.1500 |
| 0.2000                    | -0.149          | -0.008          | 0.141           | -0.170          | -0.012          | 0.159           | -0.196          | -0.015          | 0.182           | -0.220          |                 |                 | -0.236          | -0.020          | 0.216           | -0.427          | 0.028           | 0.455           | -0.580          | 0.032           | 0.611           | 0.2000 |
| 0.3000                    | -0.181          | -0.036          | 0.145           | -0.206          | -0.035          | 0.172           | -0.222          | -0.037          | 0.185           |                 |                 |                 | -0.220          | -0.026          | 0.194           | -0.239          | 0.003           | 0.242           | -0.587          | 0.005           | 0.592           | 0.3000 |
| 0.4000                    | -0.207          | -0.051          | 0.156           | -0.215          | -0.049          | 0.166           | -0.209          | -0.044          | 0.164           |                 |                 |                 | -0.178          | -0.016          | 0.162           | -0.225          | -0.025          | 0.200           | -0.609          | -0.012          | 0.598           | 0.4000 |
| 0.5000                    | -0.201          | -0.050          | 0.151           | -0.195          | -0.046          | 0.149           | -0.181          | -0.030          | 0.151           |                 |                 |                 | -0.196          | -0.032          | 0.164           | -0.161          | -0.030          | 0.131           | -0.617          | -0.031          | 0.586           | 0.5000 |
| 0.6000                    |                 | -0.040          |                 | -0.183          | -0.044          | 0.139           | -0.197          | -0.045          | 0.152           |                 |                 |                 | -0.200          | -0.042          | 0.158           | -0.173          | -0.041          | 0.131           | -0.614          | -0.036          | 0.578           | 0.6000 |
| 0.7000                    | -0.190          |                 |                 | -0.207          | -0.048          | 0.159           | -0.202          | -0.046          | 0.149           |                 |                 |                 | -0.179          | -0.054          | 0.124           | -0.203          | -0.050          | 0.153           | -0.565          | -0.046          | 0.519           | 0.7000 |
| 0.8000                    | -0.191          | -0.065          | 0.126           | -0.189          | -0.065          | 0.124           | -0.211          | -0.063          | 0.149           |                 |                 |                 | -0.252          | -0.063          | 0.188           | -0.234          | -0.067          | 0.167           | -0.432          | -0.055          | 0.377           | 0.8000 |
| 0.9000                    | -0.238          | -0.074          | 0.164           | -0.249          | -0.072          | 0.177           | -0.272          | -0.075          | 0.197           |                 |                 |                 | -0.308          | -0.072          | 0.236           | -0.235          | -0.076          | 0.159           | -0.267          | -0.053          | 0.215           | 0.9000 |
| 1.0000                    | -0.332          | -0.082          | 0.249           | -0.385          | -0.068          | 0.317           | -0.384          | -0.082          | 0.302           |                 |                 |                 | -0.346          | -0.080          | 0.266           | -0.205          | -0.079          | 0.127           | -0.070          | -0.038          | 0.032           | 1.0000 |
| M = 1.102      α = 03.93  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.090           | 0.205           | 0.115           | -0.011          | 0.170           | 0.181           | -0.058          | 0.231           | 0.289           |                 |                 |                 | -0.241          | 0.293           | 0.534           | -0.505          | 0.231           | 0.736           | -0.516          | 0.166           |                 | 0.0000 |
| 0.0125                    | 0.042           | 0.154           | 0.112           | -0.006          | 0.145           | 0.151           | -0.044          | 0.197           | 0.241           | -0.189          | 0.239           | 0.428           | -0.311          | 0.251           | 0.562           | -0.497          | 0.218           | 0.715           | -0.514          |                 |                 | 0.0125 |
| 0.0250                    | 0.012           | 0.120           | 0.108           | -0.002          | 0.130           | 0.132           | -0.035          | 0.174           | 0.209           | -0.194          | 0.223           | 0.417           | -0.320          | 0.219           | 0.539           |                 | 0.202           |                 | -0.512          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.002           | 0.099           | 0.098           | 0.004           | 0.128           | 0.124           | -0.037          | 0.158           | 0.195           |                 | 0.184           |                 | -0.157          | 0.184           | 0.341           | -0.499          | 0.159           | 0.657           | -0.513          | 0.147           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.015           | 0.095           | 0.080           | -0.001          | 0.133           | 0.135           | -0.038          | 0.151           | 0.190           | -0.087          |                 |                 | -0.126          | 0.160           | 0.286           | -0.520          | 0.134           | 0.654           | -0.514          | 0.131           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.006           | 0.108           | 0.102           | -0.005          | 0.137           | 0.142           | -0.055          | 0.149           | 0.204           | -0.088          | 0.152           | 0.241           | -0.125          | 0.140           | 0.265           | -0.514          | 0.111           | 0.625           | -0.518          | 0.103           | 0.621           | 0.1000 |
| 0.1500                    | 0.010           | 0.133           | 0.123           | -0.032          | 0.140           | 0.172           | -0.059          | 0.134           | 0.194           | -0.094          | 0.130           | 0.224           | -0.125          | 0.112           | 0.238           | -0.476          | 0.081           | 0.557           | -0.517          | 0.088           | 0.605           | 0.1500 |
| 0.2000                    | -0.022          | 0.140           | 0.162           | -0.039          | 0.142           | 0.181           | -0.076          | 0.127           | 0.204           | -0.100          |                 |                 | -0.127          | 0.095           | 0.221           | -0.402          | 0.062           | 0.465           | -0.514          | 0.066           | 0.580           | 0.2000 |
| 0.3000                    | -0.048          | 0.120           | 0.168           | -0.072          | 0.111           | 0.184           | -0.115          | 0.082           | 0.197           |                 |                 |                 | -0.144          | 0.068           | 0.212           | -0.221          | 0.026           | 0.246           | -0.510          | 0.041           | 0.551           | 0.3000 |
| 0.4000                    | -0.099          | 0.069           | 0.168           | -0.114          | 0.069           | 0.183           | -0.140          | 0.054           | 0.194           |                 |                 |                 | -0.156          | 0.044           | 0.199           | -0.210          | 0.003           | 0.213           | -0.529          | 0.021           | 0.550           | 0.4000 |
| 0.5000                    | -0.134          | 0.047           | 0.181           | -0.141          | 0.039           | 0.180           | -0.152          | 0.025           | 0.177           |                 |                 |                 | -0.170          | 0.008           | 0.178           | -0.153          | -0.005          | 0.148           | -0.536          | 0.010           | 0.546           | 0.5000 |
| 0.6000                    |                 | 0.013           |                 | -0.158          | 0.002           | 0.160           | -0.175          | -0.009          | 0.165           |                 |                 |                 | -0.174          | -0.018          | 0.156           | -0.111          | -0.014          | 0.097           | -0.535          | 0.005           | 0.540           | 0.6000 |
| 0.7000                    | -0.161          |                 |                 | -0.173          | -0.026          | 0.147           | -0.178          | -0.034          | 0.144           |                 |                 |                 | -0.139          | -0.040          | 0.099           | -0.111          | -0.033          | 0.077           | -0.520          | 0.013           | 0.533           | 0.7000 |
| 0.8000                    | -0.157          | -0.045          | 0.111           | -0.138          | -0.048          | 0.089           | -0.149          | -0.057          | 0.092           |                 |                 |                 | -0.183          | -0.051          | 0.132           | -0.153          | -0.042          | 0.111           | -0.439          | 0.016           | 0.455           | 0.8000 |
| 0.9000                    | -0.157          | -0.053          | 0.104           | -0.166          | -0.045          | 0.120           | -0.187          | -0.052          | 0.135           |                 |                 |                 | -0.218          | -0.044          | 0.174           | -0.147          | -0.027          | 0.120           | -0.264          | 0.022           | 0.285           | 0.9000 |
| 1.0000                    | -0.161          | -0.045          | 0.115           | -0.257          | -0.018          | 0.238           | -0.293          | -0.019          | 0.274           |                 |                 |                 | -0.243          | -0.018          | 0.225           | -0.093          | 0.012           | 0.105           | -0.005          | 0.029           | 0.023           | 1.0000 |
| M = 1.298      α = -04.13 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.195           | 0.014           | -0.180          | 0.106           | -0.018          | -0.124          | 0.107           | -0.070          | -0.177          |                 |                 |                 | 0.221           | -0.232          | -0.453          | 0.238           | -0.396          | -0.634          | 0.252           | -0.477          |                 | 0.0000 |
| 0.0125                    | 0.118           | 0.012           | -0.105          | 0.070           | -0.027          | -0.097          | 0.081           | -0.069          | -0.150          | 0.122           | -0.143          | -0.266          | 0.163           | -0.244          | -0.407          | 0.202           | -0.393          | -0.594          | 0.205           |                 |                 | 0.0125 |
| 0.0250                    | 0.064           | 0.007           | -0.057          | 0.046           | -0.035          | -0.081          | 0.062           | -0.069          | -0.131          | 0.102           | -0.120          | -0.222          | 0.121           | -0.239          | -0.360          |                 | -0.391          |                 | 0.170           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.028           | -0.012          | -0.039          | 0.038           | -0.047          | -0.085          | 0.043           | -0.074          | -0.117          |                 | -0.115          |                 | 0.087           | -0.177          | -0.264          | 0.125           | -0.393          | -0.518          | 0.133           | -0.438          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.032           | -0.031          | -0.063          | 0.024           | -0.051          | -0.074          | 0.043           | -0.080          | -0.124          | 0.063           |                 |                 | 0.080           | -0.120          | -0.200          | 0.099           | -0.398          | -0.497          | 0.116           | -0.440          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.019           | -0.035          | -0.055          | 0.020           | -0.056          | -0.076          | 0.039           | -0.085          | -0.124          | 0.047           | -0.110          | -0.158          | 0.070           | -0.103          | -0.172          | 0.081           | -0.377          | -0.458          | 0.103           | -0.442          | -0.545          | 0.1000 |
| 0.1500                    | 0.016           | -0.046          | -0.062          | 0.017           | -0.063          | -0.080          | 0.044           | -0.095          | -0.139          | 0.045           | -0.088          | -0.133          | 0.058           | -0.102          | -0.160          | 0.061           | -0.258          | -0.319          | 0.087           | -0.450          | -0.537          | 0.1500 |
| 0.2000                    | 0.006           | -0.053          | -0.059          | 0.042           | -0.062          | -0.105          | 0.038           | -0.060          | -0.098          | 0.052           |                 |                 | 0.049           | -0.113          | -0.162          | 0.054           | -0.213          | -0.267          | 0.076           | -0.448          | -0.524          | 0.2000 |
| 0.3000                    | 0.036           | -0.071          | -0.107          | 0.034           | -0.075          | -0.109          | 0.030           | -0.098          | -0.128          |                 |                 |                 | 0.037           | -0.105          | -0.142          | 0.041           | -0.164          | -0.206          | 0.071           | -0.382          | -0.453          | 0.3000 |
| 0.4000                    | 0.029           | -0.092          | -0.121          | 0.028           | -0.096          | -0.124          | 0.024           | -0.112          | -0.135          |                 |                 |                 | 0.016           | -0.117          | -0.133          | 0.041           | -0.164          | -0.206          | 0.071           | -0.382          | -0.453          | 0.4000 |
| 0.5000                    | 0.013           | -0.101          | -0.115          | 0.016           | -0.109          | -0.125          | 0.012           | -0.119          | -0.131          |                 |                 |                 | 0.020           | -0.118          | -0.137          | 0.073           | -0.154          | -0.227          | 0.053           | -0.349          | -0.402          | 0.5000 |
| 0.6000                    |                 | -0.117          |                 | 0.016           | -0.119          | -0.135          | 0.010           | -0.129          | -0.138          |                 |                 |                 | 0.018           | -0.134          | -0.151          | 0.049           | -0.159          | -0.208          | 0.036           | -0.306          | -0.342          | 0.6000 |
| 0.7000                    | 0.018           |                 |                 | 0.011           | -0.127          | -0.138          | 0.010           | -0.133          | -0.142          |                 |                 |                 | 0.076           | -0.132          | -0.207          | 0.021           | -0.165          | -0.186          | 0.025           | -0.257          | -0.283          | 0.7000 |
| 0.8000                    | 0.002           | -0.134          | -0.136          | 0.031           | -0.133          | -0.164          | 0.039           | -0.139          | -0.178          |                 |                 |                 | 0.035           | -0.133          | -0.169          | -0.014          | -0.160          | -0.145          | 0.012           | -0.210          | -0.222          | 0.8000 |
| 0.9000                    | 0.028           | -0.139          | -0.139          | 0.027           | -0.109          | -0.136          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> |        |
| M = 1.299      α = -0.20 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.133           | 0.080           | -0.052          | 0.002           | -0.115          | -0.117          | -0.007          | 0.071           | 0.079           | -0.019          | 0.039           | 0.058           | 0.040           | 0.034           | -0.006          | -0.003          | 0.023           | 0.026           | -0.048          | -0.081          |                 | 0.0000 |
| 0.0125                   | 0.068           | 0.074           | 0.006           | -0.006          | -0.019          | -0.014          | -0.015          | 0.035           | 0.050           | -0.019          | 0.015           | 0.041           | 0.010           | 0.007           | -0.002          | -0.018          | -0.009          | 0.009           | -0.061          |                 |                 | 0.0125 |
| 0.0250                   | 0.026           | 0.063           | 0.037           | -0.011          | 0.033           | 0.044           | -0.024          | 0.008           | 0.032           | -0.026          |                 |                 | -0.013          | -0.013          | 0.000           | -0.033          | -0.003          | -0.072          | -0.087          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | 0.008           | 0.022           | 0.013           | -0.017          | 0.007           | 0.024           | -0.041          | -0.014          | 0.027           | -0.009          |                 |                 | -0.036          | -0.036          | 0.001           | -0.052          | -0.057          | -0.004          | -0.091          | -0.088          |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.007          | 0.004           | 0.011           | -0.027          | -0.008          | 0.019           | -0.041          | -0.021          | 0.019           | -0.036          |                 |                 | -0.045          | -0.038          | 0.007           | -0.067          | -0.061          | 0.006           | -0.098          | -0.089          |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.019          | -0.005          | 0.014           | -0.033          | -0.017          | 0.016           | -0.042          | -0.018          | 0.024           | -0.039          | -0.039          |                 | -0.050          | -0.026          | 0.023           | -0.074          | -0.065          | 0.009           | -0.099          | -0.088          | 0.010           | 0.1000 |
| 0.1500                   | -0.025          | -0.010          | 0.015           | -0.044          | -0.019          | 0.025           | -0.036          | -0.035          | 0.001           | -0.037          | -0.035          | 0.002           | -0.052          | -0.025          | 0.027           | -0.079          | -0.070          | 0.009           | -0.100          | -0.090          | -0.010          | 0.1500 |
| 0.2000                   | -0.043          | -0.019          | 0.023           | -0.029          | -0.008          | 0.021           | -0.027          | -0.016          | 0.011           | -0.046          |                 |                 | -0.041          | -0.046          | -0.005          | -0.081          | -0.064          | 0.016           | -0.098          | -0.096          | 0.002           | 0.2000 |
| 0.3000                   | -0.031          | -0.026          | 0.005           | -0.036          | -0.019          | 0.017           | -0.041          | -0.038          | 0.003           |                 |                 |                 | -0.057          | -0.042          | 0.015           | -0.073          | -0.077          | -0.003          | -0.089          | -0.102          | -0.012          | 0.3000 |
| 0.4000                   | -0.035          | -0.033          | 0.001           | -0.039          | -0.038          | 0.001           | -0.051          | -0.045          | 0.005           |                 |                 |                 | -0.056          | -0.061          | -0.004          | -0.055          | -0.079          | -0.024          | -0.091          | -0.101          | -0.010          | 0.4000 |
| 0.5000                   | -0.049          | -0.046          | 0.003           | -0.047          | -0.056          | -0.009          | -0.056          | -0.063          | -0.007          |                 |                 |                 | -0.072          | -0.053          | 0.019           | -0.038          | -0.073          | -0.035          | -0.079          | -0.101          | -0.021          | 0.5000 |
| 0.6000                   |                 |                 |                 | -0.047          | -0.062          | -0.003          | -0.063          | -0.068          | -0.005          |                 |                 |                 | -0.048          | -0.077          | -0.030          | -0.012          | -0.086          | -0.074          | -0.068          | -0.103          | -0.034          | 0.6000 |
| 0.7000                   | -0.054          | -0.064          |                 | -0.066          | -0.070          | -0.004          | -0.065          | -0.069          | -0.004          |                 |                 |                 | -0.026          | -0.074          | -0.048          | -0.037          | -0.094          | -0.057          | -0.064          | -0.102          | -0.038          | 0.7000 |
| 0.8000                   | -0.072          | -0.082          | -0.010          | -0.065          | -0.080          | -0.015          | -0.044          | -0.087          | -0.044          |                 |                 |                 | -0.062          | -0.081          | -0.019          | -0.065          | -0.091          | -0.026          | -0.064          | -0.101          | -0.037          | 0.8000 |
| 0.9000                   | -0.061          | -0.077          | -0.017          | -0.058          | -0.078          | -0.020          | -0.075          | -0.086          | -0.011          |                 |                 |                 | -0.109          | -0.086          | 0.023           | -0.070          | -0.089          | -0.020          | -0.071          | -0.086          | -0.016          | 0.9000 |
| 1.0000                   | -0.019          | -0.064          | -0.044          | -0.046          | -0.065          | -0.019          | -0.160          | -0.064          | 0.095           |                 |                 |                 | -0.166          | -0.088          | 0.078           | -0.049          | -0.089          | -0.040          | -0.083          | -0.058          | 0.025           | 1.0000 |
| M = 1.301      α = 03.69 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.014           | 0.166           | 0.151           | -0.088          | 0.126           | 0.216           | -0.156          | 0.158           | 0.315           | -0.263          | 0.216           | 0.479           | -0.263          | 0.216           | 0.479           | -0.405          | 0.223           | 0.628           | -0.435          | 0.175           |                 | 0.0000 |
| 0.0125                   | 0.001           | 0.127           | 0.126           | -0.083          | 0.102           | 0.185           | -0.128          | 0.108           | 0.236           | -0.221          | 0.141           | 0.361           | -0.267          | 0.163           | 0.430           | -0.403          | 0.188           | 0.592           | -0.439          |                 |                 | 0.0125 |
| 0.0250                   | -0.014          | 0.097           | 0.111           | -0.079          | 0.081           | 0.160           | -0.111          | 0.073           | 0.185           | -0.216          | 0.103           | 0.319           | -0.267          | 0.124           | 0.390           |                 | 0.159           |                 | -0.442          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.049          | 0.065           | 0.114           | -0.073          | 0.047           | 0.120           | -0.113          | 0.051           | 0.165           | 0.080           |                 |                 | -0.246          | 0.088           | 0.334           | -0.402          | 0.119           | 0.521           | -0.441          | 0.141           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.053          | 0.036           | 0.089           | -0.078          | 0.037           | 0.116           | -0.107          | 0.038           | 0.145           | -0.118          |                 |                 | -0.147          | 0.075           | 0.222           | -0.403          | 0.093           | 0.496           | -0.442          | 0.122           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.056          | 0.028           | 0.084           | -0.084          | 0.029           | 0.113           | -0.105          | 0.039           | 0.144           | -0.120          | 0.045           | 0.165           | -0.151          | 0.075           | 0.225           | -0.372          | 0.081           | 0.453           | -0.444          | 0.097           | 0.540           | 0.1000 |
| 0.1500                   | -0.070          | 0.024           | 0.094           | -0.089          | 0.023           | 0.112           | -0.102          | 0.033           | 0.134           | -0.120          | 0.041           | 0.161           | -0.137          | 0.063           | 0.200           | -0.283          | 0.063           | 0.345           | -0.448          | 0.079           | 0.526           | 0.1500 |
| 0.2000                   | -0.084          | 0.015           | 0.099           | -0.084          | 0.033           | 0.117           | -0.099          | 0.045           | 0.143           | -0.122          |                 |                 | -0.114          | 0.039           | 0.152           | -0.228          | 0.055           | 0.282           | -0.449          | 0.060           | 0.509           | 0.2000 |
| 0.3000                   | -0.088          | 0.021           | 0.109           | -0.094          | 0.035           | 0.128           | -0.108          | 0.030           | 0.138           |                 |                 |                 | -0.132          | 0.039           | 0.170           | -0.181          | 0.020           | 0.201           | -0.408          | 0.040           | 0.447           | 0.3000 |
| 0.4000                   | -0.095          | 0.019           | 0.114           | -0.105          | 0.039           | 0.143           | -0.116          | 0.019           | 0.135           |                 |                 |                 | -0.118          | 0.014           | 0.132           | -0.157          | 0.018           | 0.175           | -0.389          | 0.027           | 0.416           | 0.4000 |
| 0.5000                   | -0.111          | 0.014           | 0.124           | -0.113          | 0.012           | 0.125           | -0.121          | 0.004           | 0.125           |                 |                 |                 | -0.138          | 0.012           | 0.150           | -0.115          | 0.011           | 0.125           | -0.356          | 0.015           | 0.371           | 0.5000 |
| 0.6000                   |                 | 0.001           |                 | -0.121          |                 | 0.120           | -0.126          | -0.006          | 0.120           |                 |                 |                 | -0.124          | -0.005          | 0.118           | -0.089          | -0.007          | 0.082           | -0.314          | 0.004           | 0.318           | 0.6000 |
| 0.7000                   | -0.111          |                 |                 | -0.126          | -0.007          | 0.119           | -0.135          | -0.005          | 0.131           |                 |                 |                 | -0.084          | -0.015          | 0.069           | -0.109          | 0.002           | 0.110           | -0.267          | 0.006           | 0.274           | 0.7000 |
| 0.8000                   | -0.136          | -0.024          | 0.112           | -0.131          | -0.021          | 0.110           | -0.108          | -0.019          | 0.089           |                 |                 |                 | -0.139          | -0.004          | 0.135           | -0.138          | -0.016          | 0.122           | -0.205          | 0.009           | 0.214           | 0.8000 |
| 0.9000                   | -0.114          | -0.017          | 0.097           | -0.127          | -0.019          | 0.107           | -0.153          | -0.028          | 0.124           |                 |                 |                 | -0.185          | -0.028          | 0.157           | -0.131          | -0.014          | 0.117           | -0.160          | 0.014           | 0.174           | 0.9000 |
| 1.0000                   | -0.046          | 0.003           | 0.049           | -0.113          | -0.003          | 0.110           | -0.268          | -0.032          | 0.236           |                 |                 |                 | -0.224          | -0.088          | 0.135           | -0.085          | 0.009           | 0.094           | -0.130          | 0.022           | 0.152           | 1.0000 |
| M = 1.299      α = 07.76 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.135          | 0.262           | 0.397           | -0.223          | 0.207           | 0.430           | -0.351          | 0.240           | 0.591           | -0.479          | 0.258           | 0.737           | -0.479          | 0.258           | 0.737           | -0.468          | 0.253           | 0.721           | -0.469          | 0.236           |                 | 0.0000 |
| 0.0125                   | -0.133          | 0.218           | 0.351           | -0.292          | 0.186           | 0.478           | -0.399          | 0.202           | 0.601           | -0.493          | 0.226           | 0.720           | -0.474          | 0.240           | 0.714           | -0.467          | 0.258           | 0.726           | -0.472          |                 |                 | 0.0125 |
| 0.0250                   | -0.132          | 0.186           | 0.318           | -0.304          | 0.168           | 0.472           | -0.410          | 0.175           | 0.585           | -0.503          | 0.209           | 0.711           | -0.474          | 0.225           | 0.699           |                 | 0.258           |                 | -0.474          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.136          | 0.157           | 0.292           | -0.153          | 0.143           | 0.297           | -0.322          | 0.153           | 0.475           | 0.176           |                 |                 | -0.488          | 0.207           | 0.695           | -0.469          | 0.241           | 0.710           | -0.473          | 0.238           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.132          | 0.125           | 0.257           | -0.149          | 0.132           | 0.281           | -0.155          | 0.141           | 0.295           | -0.217          |                 |                 | -0.508          | 0.198           | 0.706           | -0.474          | 0.220           | 0.694           | -0.473          | 0.228           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.123          | 0.111           | 0.234           | -0.147          | 0.116           | 0.264           | -0.173          | 0.138           | 0.311           | -0.201          | 0.150           | 0.351           | -0.499          | 0.178           | 0.677           | -0.476          | 0.204           | 0.680           | -0.472          | 0.222           | 0.694           | 0.1000 |
| 0.1500                   | -0.126          | 0.103           | 0.229           | -0.147          | 0.112           | 0.260           | -0.171          | 0.120           | 0.291           | -0.191          | 0.153           | 0.344           | -0.296          | 0.148           | 0.645           | -0.498          | 0.174           | 0.671           | -0.471          | 0.208           | 0.678           | 0.1500 |
| 0.2000                   | -0.146          | 0.096           | 0.242           | -0.146          | 0.112           | 0.258           | -0.160          | 0.150           | 0.310           |                 |                 |                 | -0.150          | 0.140           | 0.290           | -0.510          | 0.158           | 0.668           | -0.473          | 0.195           | 0.668           | 0.2000 |
| 0.3000                   | -0.142          | 0.099           | 0.241           | -0.154          | 0.121           | 0.275           | -0.168          | 0.115           | 0.284           |                 |                 |                 | -0.187          | 0.116           | 0.303           | -0.542          | 0.138           | 0.680           | -0.471          | 0.183           | 0.653           | 0.3000 |
| 0.4000                   | -0.148          | 0.097           | 0.246           | -0.163          | 0.110           | 0.272           | -0.183          | 0.099           | 0.282           |                 |                 |                 | -0.191          | 0.123           | 0.314           | -0.548          | 0.121           | 0.669           | -0.492          | 0.171           | 0.663           | 0.4000 |
| 0.5000                   | -0.174          | 0.093           | 0.267           | -0.176          | 0.098           | 0.274           | -0.182          | 0.095           | 0.276           |                 |                 |                 | -0.193          | 0.088           | 0.281           | -0.520          | 0.115           | 0.635           | -0.510          | 0.151           | 0.661           | 0.5000 |
| 0.6000                   |                 | 0.090           |                 | -0.184          | 0.091           | 0.275           | -0.191          | 0.088           | 0.280           |                 |                 |                 | -0.190          | 0.087           | 0.276           | -0.355          | 0.104           | 0.459           | -0.529          | 0.130           | 0.659           | 0.6000 |
| 0.7000                   | -0.166          |                 |                 | -0.184          | 0.083           | 0.267           | -0.193          | 0.080           | 0.273           |                 |                 |                 | -0.115          | 0.095           | 0.210           | -0.162          | 0.115           | 0.277           | -0.567          | 0.115           | 0.662           | 0.7000 |
| 0.8000                   | -0.187          | 0.077           | 0.264           | -0.189          | 0.078           | 0.268           | -0.158          | 0.074           | 0.232           |                 |                 |                 | -0.180          | 0.084           | 0.264           | -0.158          | 0.101           | 0.259           | -0.555          | 0.100           | 0.655           | 0.8000 |
| 0.9000                   | -0.156          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| x/c                      | 2y/b=0.200      |                 |                 | 2y/b=0.250      |                 |                 | 2y/b=0.300      |                 |                 | 2y/b=0.350      |                 |                 | 2y/b=0.400      |                 |                 | 2y/b=0.600      |                 |                 | 2y/b=0.800      |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.296      α = 11.79 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.305          | 0.314           | 0.619           | -0.471          | 0.261           | 0.732           | -0.525          | 0.264           | 0.789           |                 |                 |                 | -0.520          | 0.256           | 0.775           | -0.518          | 0.212           | 0.729           | -0.509          | 0.244           |                 | 0.0000 |
| 0.0125                   | -0.371          | 0.295           | 0.666           | -0.494          | 0.267           | 0.761           | -0.524          | 0.271           | 0.795           | -0.528          | 0.265           | 0.792           | -0.516          | 0.288           | 0.805           | -0.518          | 0.268           | 0.786           | -0.519          |                 |                 | 0.0125 |
| 0.0250                   | -0.378          | 0.280           | 0.658           | -0.510          | 0.266           | 0.776           | -0.528          | 0.272           | 0.800           | -0.532          | 0.287           | 0.819           | -0.516          | 0.305           | 0.821           |                 | 0.304           |                 | -0.525          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.215          | 0.259           | 0.474           | -0.520          | 0.242           | 0.762           | -0.550          | 0.256           | 0.806           |                 | 0.279           |                 | -0.526          | 0.290           | 0.816           | -0.520          | 0.312           | 0.832           | -0.525          |                 | 0.295           | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.206          | 0.234           | 0.441           | -0.265          | 0.233           | 0.497           | -0.575          | 0.244           | 0.819           | -0.577          |                 |                 | -0.550          | 0.286           | 0.836           | -0.524          | 0.305           | 0.830           | -0.529          | 0.303           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.201          | 0.216           | 0.417           | -0.185          | 0.222           | 0.407           | -0.557          | 0.237           | 0.794           | -0.596          | 0.258           | 0.854           | -0.580          | 0.277           | 0.857           | -0.526          | 0.300           | 0.825           | -0.532          | 0.299           | 0.831           | 0.1000 |
| 0.1500                   | -0.198          | 0.200           | 0.398           | -0.204          | 0.207           | 0.411           | -0.205          | 0.232           | 0.438           | -0.593          | 0.238           | 0.831           | -0.601          | 0.254           | 0.855           | -0.544          | 0.285           | 0.830           | -0.539          | 0.290           | 0.829           | 0.1500 |
| 0.2000                   | -0.203          | 0.192           | 0.395           | -0.202          | 0.219           | 0.421           | -0.190          | 0.236           | 0.426           | -0.336          |                 |                 | -0.608          | 0.235           | 0.843           | -0.549          | 0.270           | 0.819           | -0.554          | 0.279           | 0.833           | 0.2000 |
| 0.3000                   | -0.203          | 0.198           | 0.401           | -0.210          | 0.210           | 0.420           | -0.226          | 0.212           | 0.438           |                 |                 |                 | -0.352          | 0.226           | 0.578           | -0.578          | 0.260           | 0.838           | -0.561          | 0.259           | 0.821           | 0.3000 |
| 0.4000                   | -0.213          | 0.185           | 0.398           | -0.228          | 0.194           | 0.422           | -0.241          | 0.196           | 0.437           |                 |                 |                 | -0.247          | 0.211           | 0.458           | -0.610          | 0.244           | 0.854           | -0.598          | 0.243           | 0.840           | 0.4000 |
| 0.5000                   | -0.241          | 0.184           | 0.425           | -0.241          | 0.189           | 0.430           | -0.238          | 0.191           | 0.429           |                 |                 |                 | -0.241          | 0.202           | 0.443           | -0.645          | 0.223           | 0.868           | -0.623          | 0.229           | 0.852           | 0.5000 |
| 0.6000                   |                 | 0.184           |                 | -0.244          | 0.189           | 0.433           | -0.250          | 0.202           | 0.452           |                 |                 |                 | -0.236          | 0.220           | 0.456           | -0.620          | 0.196           | 0.816           | -0.632          | 0.221           | 0.853           | 0.6000 |
| 0.7000                   | -0.228          |                 |                 | -0.243          | 0.197           | 0.440           | -0.244          | 0.194           | 0.438           |                 |                 |                 | -0.028          | 0.180           | 0.208           | -0.622          | 0.171           | 0.793           | -0.635          | 0.209           | 0.844           | 0.7000 |
| 0.8000                   | -0.252          | 0.164           | 0.416           | -0.238          | 0.166           | 0.404           | -0.154          | 0.155           | 0.308           |                 |                 |                 | -0.139          | 0.149           | 0.288           | -0.617          | 0.171           | 0.789           | -0.611          | 0.192           | 0.802           | 0.8000 |
| 0.9000                   | -0.133          | 0.148           | 0.281           | -0.159          | 0.152           | 0.311           | -0.179          | 0.150           | 0.329           |                 |                 |                 | -0.243          | 0.159           | 0.402           | -0.563          | 0.154           | 0.718           | -0.530          | 0.191           | 0.721           | 0.9000 |
| 1.0000                   | 0.130           | 0.129           | -0.001          | -0.008          | 0.152           | 0.161           | -0.320          | 0.181           | 0.500           |                 |                 |                 | -0.339          | 0.212           | 0.550           | -0.460          | 0.121           | 0.581           | -0.392          | 0.208           | 0.600           | 1.0000 |
| M = 1.299      α = 15.82 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.499          | 0.380           | 0.879           | -0.601          | 0.328           | 0.929           | -0.605          | 0.275           | 0.880           |                 |                 |                 | -0.599          | 0.247           | 0.847           | -0.578          | 0.252           | 0.830           | -0.471          | 0.188           |                 | 0.0000 |
| 0.0125                   | -0.568          | 0.398           | 0.966           | -0.596          | 0.350           | 0.946           | -0.598          | 0.328           | 0.926           | -0.593          | 0.303           | 0.896           | -0.592          | 0.323           | 0.914           | -0.579          | 0.295           | 0.874           | -0.476          |                 |                 | 0.0125 |
| 0.0250                   | -0.600          | 0.405           | 1.005           | -0.601          | 0.365           | 0.966           | -0.601          | 0.359           | 0.960           | -0.597          | 0.351           | 0.948           | -0.588          | 0.371           | 0.959           |                 | 0.333           |                 | -0.477          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.554          | 0.386           | 0.940           | -0.644          | 0.369           | 1.014           | -0.634          | 0.361           | 0.995           |                 | 0.371           |                 | -0.593          | 0.385           | 0.978           | -0.583          | 0.394           | 0.977           | -0.467          | 0.335           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.246          | 0.358           | 0.604           | -0.647          | 0.365           | 1.013           | -0.667          | 0.350           | 1.017           | -0.647          |                 |                 | -0.597          | 0.387           | 0.984           | -0.586          | 0.401           | 0.987           | -0.451          | 0.366           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.256          | 0.345           | 0.601           | -0.631          | 0.344           | 0.974           | -0.664          | 0.350           | 1.015           | -0.657          | 0.368           | 1.025           | -0.649          | 0.378           | 1.026           | -0.594          | 0.400           | 0.994           | -0.443          | 0.369           | 0.813           | 0.1000 |
| 0.1500                   | -0.266          | 0.329           | 0.596           | -0.333          | 0.328           | 0.660           | -0.655          | 0.342           | 0.997           | -0.659          | 0.360           | 1.019           | -0.654          | 0.365           | 1.019           | -0.600          | 0.387           | 0.987           | -0.446          | 0.380           | 0.825           | 0.1500 |
| 0.2000                   | -0.272          | 0.320           | 0.592           | -0.264          | 0.333           | 0.597           | -0.498          | 0.353           | 0.851           | -0.659          |                 |                 | -0.658          | 0.353           | 1.011           | -0.592          | 0.367           | 0.958           | -0.465          | 0.381           | 0.846           | 0.2000 |
| 0.3000                   | -0.269          | 0.310           | 0.579           | -0.263          | 0.328           | 0.590           | -0.303          | 0.320           | 0.624           |                 |                 |                 | -0.654          | 0.361           | 1.015           | -0.650          | 0.340           | 0.991           | -0.478          | 0.374           | 0.852           | 0.3000 |
| 0.4000                   | -0.271          | 0.307           | 0.577           | -0.281          | 0.322           | 0.603           | -0.297          | 0.336           | 0.633           |                 |                 |                 | -0.536          | 0.339           | 0.876           | -0.629          | 0.322           | 0.951           | -0.513          | 0.359           | 0.872           | 0.4000 |
| 0.5000                   | -0.281          | 0.303           | 0.584           | -0.288          | 0.321           | 0.610           | -0.297          | 0.310           | 0.607           |                 |                 |                 | -0.421          | 0.297           | 0.719           | -0.584          | 0.320           | 0.904           | -0.536          | 0.342           | 0.878           | 0.5000 |
| 0.6000                   |                 | 0.297           |                 | -0.297          | 0.285           | 0.583           | -0.303          | 0.276           | 0.580           |                 |                 |                 | -0.366          | 0.286           | 0.651           | -0.568          | 0.321           | 0.889           | -0.560          | 0.337           | 0.897           | 0.6000 |
| 0.7000                   | -0.271          |                 |                 | -0.302          | 0.274           | 0.575           | -0.312          | 0.270           | 0.582           |                 |                 |                 | -0.330          | 0.286           | 0.616           | -0.580          | 0.313           | 0.892           | -0.566          | 0.319           | 0.884           | 0.7000 |
| 0.8000                   | -0.298          | 0.264           | 0.562           | -0.308          | 0.272           | 0.580           | -0.279          | 0.277           | 0.556           |                 |                 |                 | -0.076          | 0.279           | 0.355           | -0.580          | 0.294           | 0.874           | -0.561          | 0.309           | 0.870           | 0.8000 |
| 0.9000                   | -0.223          | 0.257           | 0.479           | -0.159          | 0.278           | 0.437           | -0.182          | 0.261           | 0.442           |                 |                 |                 | -0.202          | 0.267           | 0.469           | -0.579          | 0.282           | 0.861           | -0.553          | 0.307           | 0.866           | 0.9000 |
| 1.0000                   | -0.045          | 0.256           | 0.301           | 0.144           | 0.290           | 0.146           | -0.019          | 0.221           | 0.240           |                 |                 |                 | -0.707          | 0.251           | 0.958           | -0.577          | 0.277           | 0.854           | -0.542          | 0.313           | 0.856           | 1.0000 |
| M = 1.498      α = 03.68 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.004          | 0.158           | 0.163           | -0.068          | 0.162           | 0.230           | -0.148          | 0.166           | 0.314           |                 |                 |                 | -0.231          | 0.215           | 0.446           | -0.353          | 0.241           | 0.594           | -0.442          | 0.192           |                 | 0.0000 |
| 0.0125                   | -0.022          | 0.121           | 0.143           | -0.073          | 0.117           | 0.190           | -0.122          | 0.128           | 0.250           | -0.180          | 0.170           | 0.350           | -0.217          | 0.171           | 0.387           | -0.341          | 0.199           | 0.540           | -0.423          |                 |                 | 0.0125 |
| 0.0250                   | -0.036          | 0.093           | 0.129           | -0.075          | 0.085           | 0.160           | -0.102          | 0.101           | 0.204           | -0.171          | 0.132           | 0.303           | -0.208          | 0.138           | 0.346           |                 | 0.167           |                 | -0.411          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.053          | 0.063           | 0.116           | -0.067          | 0.060           | 0.126           | -0.086          | 0.079           | 0.165           |                 | 0.098           |                 | -0.206          | 0.108           | 0.314           | -0.325          | 0.136           | 0.461           | -0.408          | 0.144           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.052          | 0.048           | 0.099           | -0.063          | 0.058           | 0.120           | -0.074          | 0.065           | 0.139           | -0.093          |                 |                 | -0.119          | 0.094           | 0.213           | -0.329          | 0.114           | 0.443           | -0.403          | 0.125           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.049          | 0.041           | 0.090           | -0.059          | 0.055           | 0.113           | -0.073          | 0.054           | 0.127           | -0.097          | 0.060           | 0.156           | -0.110          | 0.081           | 0.191           | -0.325          | 0.098           | 0.422           | -0.406          | 0.106           | 0.513           | 0.1000 |
| 0.1500                   | -0.049          | 0.042           | 0.091           | -0.056          | 0.047           | 0.103           | -0.068          | 0.037           | 0.105           | -0.095          | 0.055           | 0.151           | -0.109          | 0.059           | 0.168           | -0.254          | 0.068           | 0.322           | -0.407          | 0.088           | 0.495           | 0.1500 |
| 0.2000                   | -0.050          | 0.029           | 0.078           | -0.058          | 0.036           | 0.094           | -0.071          | 0.065           | 0.137           | -0.088          |                 |                 | -0.105          | 0.041           | 0.146           | -0.175          | 0.057           | 0.232           | -0.403          | 0.073           | 0.476           | 0.2000 |
| 0.3000                   | -0.055          | 0.022           | 0.076           | -0.070          | 0.031           | 0.102           | -0.094          | 0.027           | 0.121           |                 |                 |                 | -0.105          | 0.033           | 0.137           | -0.149          | 0.043           | 0.192           | -0.341          | 0.050           | 0.391           | 0.3000 |
| 0.4000                   | -0.079          | 0.021           | 0.100           | -0.082          | 0.027           | 0.109           | -0.089          | 0.017           | 0.106           |                 |                 |                 | -0.102          | 0.031           | 0.133           | -0.144          | 0.031           | 0.175           | -0.269          | 0.034           | 0.303           | 0.4000 |
| 0.5000                   | -0.090          | 0.015           | 0.105           | -0.092          | 0.014           | 0.106           | -0.120          | 0.015           | 0.115           |                 |                 |                 | -0.104          | 0.010           | 0.115           | -0.138          | 0.020           | 0.158           | -0.220          | 0.030           | 0.250           | 0.5000 |
| 0.6000                   |                 | 0.011           |                 | -0.095          | 0.014           | 0.109           | -0.104          | 0.015           | 0.119           |                 |                 |                 | -0.107          | 0.026           | 0.133           | -0.108          | 0.016           | 0.124           | -0.192          | 0.019           | 0.211           | 0.6000 |
| 0.7000                   | -0.086          |                 |                 | -0.102          | 0.013           | 0.115           | -0.108          | 0.009           | 0.116           |                 |                 |                 | -0.071          | 0.008           | 0.079           | -0.085          | 0.015           | 0.100           | -0.169          | 0.017           | 0.184           | 0.7000 |
| 0.8000                   | -0.112          | -0.008          | 0.105           | -0.110          | -0.001          | 0.109           | -0.101          | 0.008           | 0.108           |                 |                 |                 | -0.111          | 0.006           | 0.117           | -0.099          | 0.005           | 0.104           | -0.154          | 0.012           | 0.164           | 0.8000 |
| 0.9000                   | -0.106          | -0.001          | 0.105           | -0.095          | 0.004           | 0.099           | -0.113          | 0.000           | 0.113           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.698      α = 03.83  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.012           | 0.162           | 0.150           | -0.039          | 0.142           | 0.181           | -0.119          | 0.173           | 0.293           |                 |                 |                 | -0.223          | 0.210           | 0.433           | -0.318          | 0.231           | 0.549           | -0.332          | 0.162           |                 | 0.0000 |
| 0.0125                    | 0.004           | 0.134           | 0.129           | -0.052          | 0.122           | 0.174           | -0.100          | 0.132           | 0.232           | -0.161          | 0.157           | 0.318           | -0.196          | 0.166           | 0.362           | -0.297          | 0.187           | 0.484           | -0.335          |                 |                 | 0.0125 |
| 0.0250                    | -0.004          | 0.111           | 0.115           | -0.059          | 0.104           | 0.163           | -0.087          | 0.102           | 0.189           | -0.147          | 0.121           | 0.269           | -0.180          | 0.133           | 0.313           |                 | 0.155           |                 | -0.335          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.024          | 0.083           | 0.107           | -0.056          | 0.076           | 0.132           | -0.080          | 0.073           | 0.154           |                 | 0.092           |                 | -0.181          | 0.102           | 0.283           | -0.261          | 0.125           | 0.386           | -0.326          | 0.136           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.121           |                 | 0.0640 |
| 0.0750                    | -0.038          | 0.062           | 0.100           | -0.057          | 0.055           | 0.112           | -0.076          | 0.056           | 0.132           | -0.095          |                 |                 | -0.158          | 0.088           | 0.246           | -0.257          | 0.100           | 0.357           | -0.316          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.110           |                 | 0.0810 |
| 0.1000                    | -0.040          | 0.053           | 0.092           | -0.059          | 0.043           | 0.102           | -0.077          | 0.051           | 0.128           | -0.100          | 0.057           | 0.157           | -0.113          | 0.077           | 0.189           | -0.253          | 0.085           | 0.338           | -0.305          | 0.101           | 0.406           | 0.1000 |
| 0.1500                    | -0.046          | 0.037           | 0.083           | -0.064          | 0.037           | 0.102           | -0.080          | 0.040           | 0.120           | -0.099          | 0.045           | 0.144           | -0.105          | 0.059           | 0.164           | -0.252          | 0.071           | 0.323           | -0.299          | 0.091           | 0.390           | 0.1500 |
| 0.2000                    | -0.055          | 0.030           | 0.085           | -0.067          | 0.038           | 0.105           | -0.081          | 0.059           | 0.139           | -0.091          |                 |                 | -0.096          | 0.043           | 0.139           | -0.238          | 0.057           | 0.295           | -0.295          | 0.078           | 0.373           | 0.2000 |
| 0.3000                    | -0.060          | 0.018           | 0.078           | -0.073          | 0.027           | 0.100           | -0.086          | 0.028           | 0.114           |                 |                 |                 | -0.097          | 0.031           | 0.128           | -0.144          | 0.028           | 0.171           | -0.287          | 0.055           | 0.342           | 0.3000 |
| 0.4000                    | -0.072          | 0.014           | 0.086           | -0.081          | 0.018           | 0.098           | -0.088          | 0.022           | 0.110           |                 |                 |                 | -0.099          | 0.035           | 0.134           | -0.132          | 0.028           | 0.159           | -0.289          | 0.044           | 0.333           | 0.4000 |
| 0.5000                    | -0.086          | 0.021           | 0.107           | -0.086          | 0.022           | 0.108           | -0.093          | 0.020           | 0.112           |                 |                 |                 | -0.102          | 0.024           | 0.126           | -0.122          | 0.029           | 0.151           | -0.288          | 0.033           | 0.322           | 0.5000 |
| 0.6000                    |                 | 0.012           |                 | -0.093          | 0.016           | 0.109           | -0.101          | 0.011           | 0.113           |                 |                 |                 | -0.102          | 0.016           | 0.118           | -0.090          | 0.022           | 0.112           | -0.251          | 0.023           | 0.274           | 0.6000 |
| 0.7000                    | -0.076          |                 |                 | -0.097          | 0.012           | 0.109           | -0.101          | 0.015           | 0.116           |                 |                 |                 | -0.072          | 0.009           | 0.081           | -0.085          | 0.020           | 0.105           | -0.213          | 0.026           | 0.239           | 0.7000 |
| 0.8000                    | -0.105          | -0.010          | 0.095           | -0.110          | -0.002          | 0.108           | -0.105          | -0.002          | 0.104           |                 |                 |                 | -0.100          | 0.006           | 0.105           | -0.095          | 0.002           | 0.097           | -0.201          | 0.023           | 0.224           | 0.8000 |
| 0.9000                    | -0.113          | -0.017          | 0.096           | -0.107          | -0.014          | 0.093           | -0.106          | -0.017          | 0.089           |                 |                 |                 | -0.128          | -0.004          | 0.124           | -0.101          | -0.004          | 0.097           | -0.163          | 0.023           | 0.187           | 0.9000 |
| 1.0000                    | -0.101          | -0.023          | 0.078           | -0.087          | -0.024          | 0.063           | -0.103          | -0.031          | 0.073           |                 |                 |                 | -0.157          | -0.020          | 0.138           | -0.104          | 0.000           | 0.104           | -0.100          | 0.026           | 0.126           | 1.0000 |
| M = 1.893      α = 04.03  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.003           | 0.187           | 0.184           | -0.038          | 0.172           | 0.210           | -0.127          | 0.194           | 0.321           |                 |                 |                 | -0.209          | 0.241           | 0.450           | -0.195          | 0.230           | 0.426           | -0.187          | 0.128           |                 | 0.0000 |
| 0.0125                    | -0.016          | 0.146           | 0.162           | -0.055          | 0.144           | 0.199           | -0.110          | 0.150           | 0.260           | -0.156          | 0.185           | 0.341           | -0.173          | 0.196           | 0.369           | -0.195          | 0.205           | 0.401           | -0.211          |                 |                 | 0.0125 |
| 0.0250                    | -0.030          | 0.116           | 0.145           | -0.064          | 0.121           | 0.185           | -0.097          | 0.120           | 0.217           | -0.146          | 0.157           | 0.302           | -0.152          | 0.160           | 0.312           |                 | 0.181           |                 | -0.225          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.040          | 0.087           | 0.127           | -0.060          | 0.089           | 0.150           | -0.088          | 0.097           | 0.185           |                 | 0.133           |                 | -0.151          | 0.120           | 0.271           | -0.194          | 0.138           | 0.331           | -0.221          | 0.146           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.138           |                 | 0.0640 |
| 0.0750                    | -0.043          | 0.072           | 0.115           | -0.058          | 0.075           | 0.132           | -0.080          | 0.087           | 0.166           | -0.086          |                 |                 | -0.153          | 0.105           | 0.258           | -0.191          | 0.115           | 0.306           | -0.220          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.125           |                 | 0.0810 |
| 0.1000                    | -0.040          | 0.069           | 0.108           | -0.061          | 0.066           | 0.127           | -0.079          | 0.080           | 0.158           | -0.097          | 0.093           | 0.190           | -0.148          | 0.094           | 0.242           | -0.188          | 0.100           | 0.289           | -0.219          | 0.116           | 0.335           | 0.1000 |
| 0.1500                    | -0.041          | 0.060           | 0.101           | -0.065          | 0.062           | 0.126           | -0.073          | 0.064           | 0.137           | -0.087          | 0.072           | 0.159           | -0.101          | 0.078           | 0.179           | -0.188          | 0.087           | 0.275           | -0.217          | 0.107           | 0.324           | 0.1500 |
| 0.2000                    | -0.049          | 0.052           | 0.101           | -0.063          | 0.059           | 0.122           | -0.067          | 0.090           | 0.157           | -0.081          |                 |                 | -0.087          | 0.065           | 0.151           | -0.185          | 0.071           | 0.257           | -0.219          | 0.088           | 0.307           | 0.2000 |
| 0.3000                    | -0.057          | 0.041           | 0.098           | -0.064          | 0.054           | 0.118           | -0.076          | 0.046           | 0.122           |                 |                 |                 | -0.091          | 0.048           | 0.139           | -0.187          | 0.041           | 0.229           | -0.213          | 0.071           | 0.283           | 0.3000 |
| 0.4000                    | -0.064          | 0.032           | 0.096           | -0.072          | 0.035           | 0.107           | -0.082          | 0.030           | 0.112           |                 |                 |                 | -0.091          | 0.023           | 0.115           | -0.166          | 0.034           | 0.200           | -0.204          | 0.049           | 0.253           | 0.4000 |
| 0.5000                    | -0.073          | 0.022           | 0.095           | -0.077          | 0.017           | 0.094           | -0.080          | 0.010           | 0.090           |                 |                 |                 | -0.089          | 0.019           | 0.108           | -0.129          | 0.025           | 0.154           | -0.209          | 0.035           | 0.245           | 0.5000 |
| 0.6000                    |                 | 0.012           |                 | -0.078          | 0.003           | 0.081           | -0.084          | 0.006           | 0.090           |                 |                 |                 | -0.087          | 0.006           | 0.092           | -0.101          | 0.017           | 0.118           | -0.212          | 0.022           | 0.234           | 0.6000 |
| 0.7000                    | -0.056          |                 |                 | -0.083          | 0.013           | 0.096           | -0.089          | 0.018           | 0.106           |                 |                 |                 | -0.073          | 0.012           | 0.085           | -0.085          | 0.014           | 0.100           | -0.209          | 0.016           | 0.226           | 0.7000 |
| 0.8000                    | -0.088          | 0.001           | 0.089           | -0.093          | -0.003          | 0.090           | -0.093          | 0.093           |                 |                 |                 |                 | -0.082          | 0.005           | 0.087           | -0.084          | 0.006           | 0.090           | -0.207          | 0.017           | 0.224           | 0.8000 |
| 0.9000                    | -0.095          | -0.007          | 0.088           | -0.092          | -0.005          | 0.087           | -0.084          | -0.004          | 0.081           |                 |                 |                 | -0.101          | 0.000           | 0.101           | -0.090          | -0.002          | 0.088           | -0.196          | 0.023           | 0.219           | 0.9000 |
| 1.0000                    | -0.077          | -0.015          | 0.061           | -0.080          | 0.008           | 0.088           | -0.063          | 0.007           | 0.070           |                 |                 |                 | -0.129          | -0.001          | 0.128           | -0.102          | -0.010          | 0.092           | -0.176          | 0.035           | 0.211           | 1.0000 |
| M = 2.234      α = -03.83 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.162           | 0.009           | -0.154          | 0.155           | -0.019          | -0.174          | 0.140           | -0.052          | -0.192          |                 |                 |                 | 0.208           | -0.081          | -0.288          | 0.218           | -0.065          | -0.283          | 0.227           | -0.168          |                 | 0.0000 |
| 0.0125                    | 0.116           | 0.004           | -0.112          | 0.114           | -0.016          | -0.130          | 0.113           | -0.046          | -0.158          | 0.128           | -0.066          | -0.194          | 0.161           | -0.076          | -0.237          | 0.185           | -0.069          | -0.254          | 0.178           |                 |                 | 0.0125 |
| 0.0250                    | 0.082           | 0.000           | -0.081          | 0.084           | -0.015          | -0.099          | 0.091           | -0.042          | -0.133          | 0.106           | -0.062          | -0.168          | 0.126           | -0.069          | -0.195          |                 | -0.074          |                 | 0.142           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.049           | -0.005          | -0.053          | 0.057           | -0.021          | -0.079          | 0.063           | -0.041          | -0.104          |                 | -0.059          |                 | 0.093           | -0.045          | -0.138          | 0.116           | -0.083          | -0.199          | 0.113           | -0.090          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.083          |                 | 0.0640 |
| 0.0750                    | 0.046           | -0.015          | -0.061          | 0.044           | -0.025          | -0.069          | 0.050           | -0.043          | -0.093          | 0.062           |                 |                 | 0.073           | -0.057          | -0.130          | 0.096           | -0.086          | -0.181          | 0.096           | -0.095          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.037           | -0.017          | -0.054          | 0.037           | -0.029          | -0.065          | 0.040           | -0.044          | -0.084          | 0.051           | -0.051          | -0.102          | 0.059           | -0.061          | -0.120          | 0.078           | -0.093          | -0.171          | 0.085           | -0.095          | -0.180          | 0.1000 |
| 0.1500                    | 0.030           | -0.020          | -0.050          | 0.029           | -0.035          | -0.064          | 0.031           | -0.046          | -0.077          | 0.039           | -0.051          | -0.090          | 0.043           | -0.061          | -0.104          | 0.058           | -0.098          | -0.156          | 0.070           | -0.095          | -0.165          | 0.1500 |
| 0.2000                    | 0.021           | -0.027          | -0.048          | 0.027           | -0.038          | -0.065          | 0.032           | -0.037          | -0.066          | 0.036           |                 |                 | 0.039           | -0.059          | -0.097          | 0.052           | -0.090          | -0.142          | 0.060           | -0.098          | -0.158          | 0.2000 |
| 0.3000                    | 0.004           | -0.043          | -0.047          | 0.008           | -0.043          | -0.051          | 0.009           | -0.055          | -0.064          |                 |                 |                 | 0.025           | -0.057          | -0.083          | 0.037           | -0.095          | -0.132          | 0.055           | -0.097          | -0.152          | 0.3000 |
| 0.4000                    | 0.004           | -0.043          | -0.047          | 0.008           | -0.043          | -0.051          | 0.009           | -0.055          | -0.064          |                 |                 |                 | 0.015           | -0.049          | -0.064          | 0.034           | -0.093          | -0.126          | 0.035           | -0.102          | -0.137          | 0.4000 |
| 0.5000                    | 0.001           | -0.046          | -0.047          | 0.004           | -0.048          | -0.052          | 0.005           | -0.058          | -0.063          |                 |                 |                 | 0.007           | -0.055          | -0.061          | 0.023           | -0.090          | -0.113          | 0.029           | -0.106          | -0.135          | 0.5000 |
| 0.6000                    |                 | -0.051          |                 | 0.004           | -0.055          | -0.059          | -0.002          | -0.061          | -0.059          |                 |                 |                 | 0.002           | -0.062          | -0.064          | 0.039           | -0.086          | -0.125          | 0.023           | -0.113          | -0.136          | 0.6000 |
| 0.7000                    | 0.039           |                 |                 | 0.004           | -0.050          | -0.054          | 0.000           | -0.059          | -0.060          |                 |                 |                 | 0.015           | -0.061          | -0.076          | 0.029           | -0.074          | -0.103          | 0.020           | -0.109          | -0.129          | 0.7000 |
| 0.8000                    | -0.002          | -0.063          | -0.061          | 0.000           | -0.057          | -0.058          |                 | -0.061          | -0.061          |                 |                 |                 | 0.022           | -0.057          | -0.079          | 0.010           | -0.077          | -0.087          | 0.018           | -0.108          | -0.125          | 0.8000 |
| 0.9000                    | 0.002           | -0.059          | -0.061          | 0.002           | -0.057          | -0.060          | 0.006           | -0.062          | -0.069          | </              |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |     |
| M = 2.233      α = 00.15 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | 0.029           | 0.115           | 0.085           | 0.042           | 0.067           | 0.024           | 0.052           | 0.118           | 0.065           | 0.040           | 0.070           | 0.030           | 0.074           | 0.111           | 0.037           | 0.051           | 0.133           | 0.081           | 0.059           | 0.020           | 0.0000          |     |
| 0.0125                   | 0.050           | 0.084           | 0.034           | 0.040           | 0.071           | 0.031           | 0.039           | 0.076           | 0.037           | 0.040           | 0.070           | 0.030           | 0.074           | 0.111           | 0.037           | 0.051           | 0.133           | 0.081           | 0.059           | 0.020           | 0.0125          |     |
| 0.0250                   | 0.057           | 0.062           | 0.006           | 0.034           | 0.067           | 0.033           | 0.026           | 0.046           | 0.020           | 0.026           | 0.059           | 0.033           | 0.026           | 0.058           | 0.032           | 0.045           | 0.087           | 0.042           | 0.034           | 0.017           | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | 0.024           | 0.042           | 0.018           | 0.012           | 0.032           | 0.020           | 0.005           | 0.021           | 0.016           |                 | 0.028           |                 | 0.005           | 0.039           | 0.034           | 0.021           | 0.053           | 0.032           | 0.006           |                 | 0.032           |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | 0.017           | 0.026           | 0.009           | 0.004           | 0.019           | 0.015           | -0.003          | 0.007           | 0.010           | -0.007          |                 |                 | -0.007          | 0.019           | 0.026           | 0.002           | 0.027           | 0.025           | -0.006          | 0.026           | 0.0500          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | 0.008           | 0.019           | 0.010           | -0.001          | 0.010           | 0.011           | -0.011          | 0.002           | 0.013           | -0.016          | 0.011           | 0.027           | -0.017          | 0.010           | 0.027           | -0.010          | 0.015           | 0.025           | -0.017          | 0.012           | 0.029           |     |
| 0.1500                   | 0.002           | 0.013           | 0.011           | -0.008          | 0.004           | 0.013           | -0.019          | -0.002          | 0.017           | -0.022          | 0.004           | 0.026           | -0.024          | -0.001          | 0.023           | -0.026          | 0.003           | 0.029           | -0.024          | 0.005           | 0.029           |     |
| 0.2000                   | -0.006          | 0.005           | 0.011           | -0.012          |                 | 0.012           | -0.021          | 0.086           | 0.107           | -0.024          |                 |                 | -0.028          | -0.006          | 0.023           | -0.031          | -0.008          | 0.024           | -0.041          | -0.002          | 0.038           |     |
| 0.3000                   | -0.009          | -0.006          | 0.004           | -0.020          | 0.010           | 0.029           | -0.028          | -0.014          | 0.014           |                 |                 |                 | -0.027          | -0.010          | 0.017           | -0.034          | -0.015          | 0.019           | -0.038          | -0.011          | 0.027           |     |
| 0.4000                   | -0.017          | -0.009          | 0.008           | -0.025          | -0.008          | 0.017           | -0.032          | 0.020           | 0.013           |                 |                 |                 | -0.031          | -0.010          | 0.020           | -0.036          | -0.018          | 0.019           | -0.050          | -0.018          | 0.032           |     |
| 0.5000                   | -0.029          | -0.013          | 0.016           | -0.030          | -0.012          | 0.019           | -0.031          | -0.020          | 0.012           |                 |                 |                 | -0.036          | -0.019          | 0.018           | -0.037          | -0.023          | 0.015           | -0.054          | -0.022          | 0.031           |     |
| 0.6000                   |                 | -0.020          |                 | -0.029          | -0.021          | 0.008           | -0.037          | -0.026          | 0.011           |                 |                 |                 | -0.038          | -0.026          | 0.013           | -0.033          | -0.024          | 0.009           | -0.059          | -0.031          | 0.028           |     |
| 0.7000                   | 0.012           |                 |                 | -0.030          | -0.022          | 0.008           | -0.035          | -0.024          | 0.010           |                 |                 |                 | -0.028          | -0.026          | 0.003           | -0.023          | -0.027          | -0.004          | -0.059          | -0.035          | 0.024           |     |
| 0.8000                   | -0.012          | -0.032          | -0.020          | -0.033          | -0.025          | 0.008           | -0.035          | -0.026          | 0.009           |                 |                 |                 | -0.029          | -0.023          | 0.006           | -0.016          | -0.033          | -0.019          | -0.059          | -0.036          | 0.023           |     |
| 0.9000                   | -0.033          | -0.031          | 0.002           | -0.032          | -0.028          | 0.004           | -0.034          | -0.031          | 0.003           |                 |                 |                 | -0.043          | -0.028          | 0.016           | -0.026          | -0.034          | -0.008          | -0.058          | -0.035          | 0.024           |     |
| 1.0000                   | -0.051          | -0.025          | 0.026           | -0.026          | -0.032          | -0.005          | -0.030          | -0.040          | -0.010          |                 |                 |                 | -0.071          | -0.039          | 0.032           | -0.058          | -0.029          | 0.029           | -0.058          | -0.031          | 0.027           |     |
| M = 2.231      α = 04.18 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.004          | 0.172           | 0.176           | -0.021          | 0.148           | 0.169           | -0.080          | 0.192           | 0.273           | -0.111          | 0.218           | 0.328           | -0.094          | 0.227           | 0.320           | -0.087          | 0.195           |                 |                 |                 | 0.0000          |     |
| 0.0125                   | -0.018          | 0.141           | 0.159           | -0.037          | 0.143           | 0.180           | -0.077          | 0.146           | 0.223           | -0.107          | 0.164           | 0.271           | -0.104          | 0.178           | 0.283           | -0.094          | 0.204           | 0.299           | -0.111          |                 | 0.0125          |     |
| 0.0250                   | -0.027          | 0.117           | 0.144           | -0.049          | 0.133           | 0.181           | -0.075          | 0.113           | 0.188           | -0.104          | 0.130           | 0.233           | -0.101          | 0.147           | 0.248           |                 | 0.183           |                 | -0.124          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.029          | 0.090           | 0.120           | -0.060          | 0.097           | 0.158           | -0.077          | 0.082           | 0.159           |                 | 0.097           |                 | -0.102          | 0.110           | 0.212           | -0.099          | 0.145           | 0.244           | -0.124          | 0.150           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.041          | 0.069           | 0.111           | -0.059          | 0.076           | 0.135           | -0.074          | 0.063           | 0.138           | -0.093          |                 |                 | -0.101          | 0.094           | 0.194           | -0.104          | 0.122           | 0.226           | -0.122          | 0.135           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.043          | 0.062           | 0.105           | -0.058          | 0.056           | 0.114           | -0.075          | 0.054           | 0.129           | -0.090          | 0.072           | 0.162           | -0.102          | 0.082           | 0.183           | -0.111          | 0.106           | 0.216           | -0.125          | 0.124           | 0.249           |     |
| 0.1500                   | -0.044          | 0.049           | 0.093           | -0.059          | 0.041           | 0.100           | -0.075          | 0.044           | 0.119           | -0.088          | 0.061           | 0.150           | -0.099          | 0.067           | 0.166           | -0.108          | 0.088           | 0.211           | -0.125          | 0.111           | 0.237           |     |
| 0.2000                   | -0.054          | 0.038           | 0.092           | -0.060          | 0.040           | 0.100           | -0.074          | 0.122           | 0.196           | -0.086          |                 |                 | -0.101          | 0.056           | 0.157           | -0.117          | 0.079           | 0.196           | -0.125          | 0.092           | 0.226           |     |
| 0.3000                   | -0.052          | 0.026           | 0.077           | -0.061          | 0.045           | 0.106           | -0.073          | 0.032           | 0.105           |                 |                 |                 | -0.084          | 0.040           | 0.124           | -0.122          | 0.062           | 0.184           | -0.125          | 0.073           | 0.198           |     |
| 0.4000                   | -0.069          | 0.020           | 0.090           | -0.064          | 0.029           | 0.092           | -0.074          | 0.018           | 0.092           |                 |                 |                 | -0.078          | 0.032           | 0.110           | -0.118          | 0.048           | 0.166           | -0.134          | 0.059           | 0.194           |     |
| 0.5000                   | -0.069          | 0.019           | 0.087           | -0.069          | 0.023           | 0.092           | -0.072          | 0.016           | 0.088           |                 |                 |                 | -0.080          | 0.022           | 0.102           | -0.120          | 0.038           | 0.158           | -0.139          | 0.052           | 0.191           |     |
| 0.6000                   |                 | 0.013           |                 | -0.067          | 0.019           | 0.087           | -0.075          | 0.011           | 0.086           |                 |                 |                 | -0.079          | 0.016           | 0.094           | -0.109          | 0.025           | 0.134           | -0.141          | 0.040           | 0.180           |     |
| 0.7000                   | -0.020          |                 |                 | -0.067          | 0.012           | 0.079           | -0.072          | 0.011           | 0.083           |                 |                 |                 | -0.072          | 0.013           | 0.085           | -0.089          | 0.017           | 0.106           | -0.138          | 0.038           | 0.176           |     |
| 0.8000                   | -0.061          | 0.001           | 0.061           | -0.072          | 0.012           | 0.084           | -0.074          | 0.011           | 0.085           |                 |                 |                 | -0.066          | 0.012           | 0.079           | -0.080          | 0.012           | 0.092           | -0.133          | 0.033           | 0.166           |     |
| 0.9000                   | -0.069          | 0.003           | 0.072           | -0.070          | 0.009           | 0.080           | -0.073          | 0.002           | 0.075           |                 |                 |                 | -0.082          | 0.006           | 0.088           | -0.076          | 0.006           | 0.082           | -0.126          | 0.031           | 0.157           |     |
| 1.0000                   | -0.044          | 0.011           | 0.055           | -0.063          | 0.003           | 0.066           | -0.069          | -0.014          | 0.054           |                 |                 |                 | -0.118          | -0.006          | 0.112           | -0.076          | 0.000           | 0.076           | -0.117          | 0.032           | 0.149           |     |
| M = 2.234      α = 08.16 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.128          | 0.259           | 0.387           | -0.145          | 0.246           | 0.391           | -0.166          | 0.268           | 0.434           | -0.186          | 0.284           | 0.470           | -0.160          | 0.290           | 0.450           | -0.159          | 0.202           |                 |                 |                 | 0.0000          |     |
| 0.0125                   | -0.113          | 0.221           | 0.334           | -0.139          | 0.219           | 0.358           | -0.156          | 0.227           | 0.383           | -0.168          | 0.242           | 0.409           | -0.168          | 0.256           | 0.423           | -0.160          | 0.275           | 0.435           | -0.173          |                 | 0.0125          |     |
| 0.0250                   | -0.104          | 0.191           | 0.295           | -0.135          | 0.197           | 0.331           | -0.150          | 0.196           | 0.346           | -0.166          | 0.216           | 0.382           | -0.158          | 0.232           | 0.390           |                 | 0.260           |                 | -0.180          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.104          | 0.157           | 0.261           | -0.134          | 0.163           | 0.297           | -0.148          | 0.166           | 0.314           |                 | 0.200           |                 | -0.161          | 0.200           | 0.361           | -0.160          | 0.233           | 0.393           | -0.180          | 0.240           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.104          | 0.137           | 0.241           | -0.138          | 0.143           | 0.281           | -0.149          | 0.144           | 0.293           | -0.045          |                 |                 | -0.160          | 0.182           | 0.343           | -0.162          | 0.215           | 0.377           | -0.179          | 0.236           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.102          | 0.129           | 0.231           | -0.138          | 0.132           | 0.270           | -0.151          | 0.132           | 0.283           | -0.155          | 0.154           | 0.309           | -0.161          | 0.169           | 0.329           | -0.165          | 0.172           | 0.363           | -0.176          | 0.207           | 0.383           |     |
| 0.1500                   | -0.091          | 0.117           | 0.208           | -0.120          | 0.123           | 0.243           | -0.145          | 0.119           | 0.276           | -0.157          | 0.138           | 0.295           | -0.157          | 0.148           | 0.306           | -0.164          | 0.177           | 0.335           | -0.175          | 0.200           | 0.375           |     |
| 0.2000                   | -0.090          | 0.103           | 0.192           | -0.105          | 0.109           | 0.213           | -0.145          | 0.114           | 0.319           | -0.157          |                 |                 | -0.159          | 0.134           | 0.294           | -0.170          | 0.155           | 0.325           | -0.184          | 0.186           | 0.370           |     |
| 0.3000                   | -0.092          | 0.080           | 0.181           | -0.096          | 0.106           | 0.203           | -0.102          | 0.097           | 0.200           |                 |                 |                 | -0.155          | 0.109           | 0.264           | -0.158          | 0.131           | 0.289           | -0.166          | 0.163           | 0.330           |     |
| 0.4000                   | -0.095          | 0.080           | 0.174           | -0.102          | 0.084           | 0.186           | -0.104          | 0.082           | 0.186           |                 |                 |                 | -0.152          | 0.101           | 0.253           | -0.167          | 0.118           | 0.284           | -0.177          | 0.142           | 0.319           |     |
| 0.5000                   | -0.099          | 0.077           | 0.176           | -0.099          | 0.077           | 0.176           | -0.098          | 0.077           | 0.175           |                 |                 |                 | -0.141          | 0.086           | 0.227           | -0.166          | 0.101           | 0.267           | -0.180          | 0.134           | 0.313           |     |
| 0.6000                   |                 | 0.066           |                 | -0.096          | 0.065           | 0.161           | -0.099          | 0.068           | 0.167           |                 |                 |                 | -0.115          | 0.077           | 0.191           | -0.169          | 0.092           | 0.261           | -0.180          | 0.116           | 0.297           |     |
| 0.7000                   | -0.040          |                 |                 | -0.095          | 0.061           | 0.156           | -0.097          | 0.065           | 0.162           |                 |                 |                 | -0.096          | 0.071           | 0.167           | -0.165          | 0.083           | 0.248           | -0.178          | 0.105           | 0.280           |     |
| 0.8000                   | -0.078          | 0.053           | 0.131           | -0.098          | 0.059           | 0.158           | -0.100          | 0.065           | 0.161           |                 |                 |                 | -0.067          | 0.065           | 0.132           | -0.160          | 0.078           | 0.238           | -0.175          | 0.105           | 0.280           |     |
| 0.9000                   | -0.095          | 0.053           | 0.147           | -0.096          | 0.057           | 0.153           | -0.101          | 0.055           | 0.166           |                 |                 |                 | -0.105          | 0.059           | 0.164           | -0.157          | 0.064           | 0.221           | -0.173          | 0.108           | 0.280           |     |
| 1.0000                   | -0.088          | 0.057           | 0.146           | -0.089          | 0.054           | 0.143           | -0.101          | 0.045           | 0.165           |                 |                 |                 | -0.211          | 0.053           | 0.264           | -0.157          | 0.040           | 0.197           | -0.171          | 0.121           | 0.292           |     |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Concluded

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| x/c                        | 2y/b=0.200 |           |              | 2y/b=0.250 |           |              | 2y/b=0.300 |           |              | 2y/b=0.350 |           |              | 2y/b=0.400 |           |              | 2y/b=0.600 |           |              | 2y/b=0.800 |           |              | x/c    |
|----------------------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|--------|
|                            | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ |        |
| M = 2.231 $\alpha = 12.24$ |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |        |
| 0.0000                     | -0.154     | 0.270     | 0.423        | -0.178     | 0.289     | 0.467        | -0.191     | 0.317     | 0.507        | -0.181     | 0.305     | 0.487        | -0.219     | 0.323     | 0.542        | -0.181     | 0.317     | 0.499        | -0.171     | 0.273     |              | 0.0000 |
| 0.0125                     | -0.159     | 0.267     | 0.427        | -0.173     | 0.287     | 0.460        | -0.181     | 0.293     | 0.474        | -0.181     | 0.299     | 0.479        | -0.189     | 0.316     | 0.504        | -0.176     | 0.323     | 0.500        | -0.182     |           |              | 0.0125 |
| 0.0250                     | -0.162     | 0.260     | 0.422        | -0.169     | 0.281     | 0.451        | -0.175     | 0.274     | 0.449        | -0.181     |           |              | -0.172     | 0.306     | 0.479        |            | 0.323     |              | -0.188     | 0.310     |              | 0.0250 |
| 0.0420                     |            |           |              |            |           |              |            |           |              |            | 0.274     |              | -0.181     | 0.282     | 0.463        | -0.170     | 0.303     | 0.473        | -0.187     |           |              | 0.0420 |
| 0.0500                     | -0.157     | 0.232     | 0.389        | -0.165     | 0.262     | 0.428        | -0.174     | 0.249     | 0.423        |            |           |              | -0.180     | 0.269     | 0.450        | -0.173     | 0.287     | 0.460        | -0.185     | 0.309     |              | 0.0500 |
| 0.0640                     |            |           |              |            |           |              |            |           |              | -0.173     |           |              |            |           |              |            |           |              |            |           |              | 0.0640 |
| 0.0750                     | -0.153     | 0.213     | 0.366        | -0.170     | 0.235     | 0.405        | -0.175     | 0.226     | 0.401        |            |           |              | -0.180     | 0.269     | 0.450        | -0.173     | 0.287     | 0.460        | -0.185     | 0.299     |              | 0.0750 |
| 0.0810                     |            |           |              |            |           |              |            |           |              |            |           |              | -0.181     | 0.251     | 0.432        | -0.176     | 0.279     | 0.454        | -0.184     | 0.290     | 0.475        | 0.0810 |
| 0.1000                     | -0.153     | 0.204     | 0.357        | -0.170     | 0.217     | 0.387        | -0.176     | 0.216     | 0.393        | -0.173     | 0.244     | 0.417        | -0.178     | 0.225     | 0.403        | -0.180     | 0.257     | 0.438        | -0.183     | 0.276     | 0.458        | 0.1000 |
| 0.1500                     | -0.144     | 0.194     | 0.338        | -0.165     | 0.199     | 0.364        | -0.179     | 0.198     | 0.377        | -0.174     | 0.225     | 0.399        | -0.181     | 0.206     | 0.387        | -0.176     | 0.242     | 0.418        | -0.187     | 0.267     | 0.453        | 0.1500 |
| 0.2000                     | -0.131     | 0.178     | 0.309        | -0.159     | 0.189     | 0.348        | -0.177     | 0.237     | 0.414        | -0.174     |           |              | -0.178     | 0.186     | 0.364        | -0.181     | 0.220     | 0.401        | -0.183     | 0.251     | 0.433        | 0.2000 |
| 0.3000                     | -0.119     | 0.161     | 0.280        | -0.136     | 0.178     | 0.313        | -0.167     | 0.169     | 0.335        |            |           |              | -0.176     | 0.176     | 0.352        | -0.181     | 0.200     | 0.381        | -0.176     | 0.231     | 0.408        | 0.3000 |
| 0.4000                     | -0.121     | 0.152     | 0.273        | -0.127     | 0.161     | 0.288        | -0.159     | 0.160     | 0.319        |            |           |              | -0.174     | 0.156     | 0.330        | -0.181     | 0.186     | 0.367        | -0.188     | 0.224     | 0.412        | 0.4000 |
| 0.5000                     | -0.121     | 0.142     | 0.263        | -0.122     | 0.144     | 0.266        | -0.128     | 0.144     | 0.273        |            |           |              | -0.168     | 0.146     | 0.314        | -0.184     | 0.169     | 0.353        | -0.192     | 0.211     | 0.402        | 0.5000 |
| 0.6000                     |            | 0.128     |              | -0.117     | 0.130     | 0.247        | -0.119     | 0.132     | 0.251        |            |           |              | -0.158     | 0.133     | 0.290        | -0.182     | 0.158     | 0.340        | -0.190     | 0.196     | 0.386        | 0.6000 |
| 0.7000                     | -0.058     |           |              | -0.117     | 0.116     | 0.233        | -0.117     | 0.121     | 0.238        |            |           |              | -0.142     | 0.127     | 0.269        | -0.180     | 0.143     | 0.323        | -0.186     | 0.189     | 0.376        | 0.7000 |
| 0.8000                     | -0.111     | 0.106     | 0.217        | -0.117     | 0.116     | 0.233        | -0.117     | 0.121     | 0.238        |            |           |              | -0.138     | 0.120     | 0.258        | -0.179     | 0.133     | 0.312        | -0.185     | 0.181     | 0.366        | 0.8000 |
| 0.9000                     | -0.115     | 0.113     | 0.228        | -0.115     | 0.116     | 0.231        | -0.124     | 0.114     | 0.237        |            |           |              | -0.146     | 0.111     | 0.257        | -0.180     | 0.129     | 0.309        | -0.186     | 0.171     | 0.357        | 0.9000 |
| 1.0000                     | -0.071     | 0.132     | 0.203        | -0.109     | 0.125     | 0.234        | -0.134     | 0.108     | 0.242        |            |           |              |            |           |              |            |           |              |            |           |              | 1.0000 |
| M = 2.224 $\alpha = 16.22$ |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |        |
| 0.0000                     | -0.185     | 0.312     | 0.496        | -0.184     | 0.287     | 0.472        | -0.199     | 0.276     | 0.475        | -0.230     | 0.335     | 0.565        | -0.196     | 0.335     | 0.551        | -0.183     | 0.322     | 0.505        | -0.174     | 0.323     |              | 0.0000 |
| 0.0125                     | -0.183     | 0.332     | 0.515        | -0.184     | 0.296     | 0.480        | -0.194     | 0.299     | 0.494        | -0.196     | 0.353     | 0.540        | -0.196     | 0.355     | 0.551        | -0.181     | 0.357     | 0.538        | -0.189     |           |              | 0.0125 |
| 0.0250                     | -0.182     | 0.342     | 0.524        | -0.184     | 0.300     | 0.484        | -0.191     | 0.312     | 0.503        | -0.187     |           |              | -0.179     | 0.364     | 0.542        |            | 0.377     |              | -0.197     | 0.367     |              | 0.0250 |
| 0.0420                     |            |           |              |            |           |              |            |           |              |            | 0.348     |              | -0.191     | 0.348     | 0.539        | -0.179     | 0.372     | 0.551        | -0.192     |           |              | 0.0420 |
| 0.0500                     | -0.180     | 0.333     | 0.513        | -0.181     | 0.293     | 0.474        | -0.190     | 0.304     | 0.494        |            |           |              | -0.192     | 0.341     | 0.532        | -0.181     | 0.367     | 0.548        | -0.192     | 0.372     |              | 0.0500 |
| 0.0640                     |            |           |              |            |           |              |            |           |              | -0.176     |           |              | -0.192     |           |              |            |           |              |            |           |              | 0.0640 |
| 0.0750                     | -0.175     | 0.284     | 0.459        | -0.184     | 0.284     | 0.469        | -0.190     | 0.293     | 0.483        |            |           |              | -0.192     | 0.341     | 0.532        | -0.181     | 0.367     | 0.548        | -0.192     | 0.368     |              | 0.0750 |
| 0.0810                     |            |           |              |            |           |              |            |           |              |            | 0.319     | 0.503        | -0.192     | 0.330     | 0.522        | -0.183     | 0.353     | 0.537        | -0.190     | 0.365     | 0.555        | 0.0810 |
| 0.1000                     | -0.177     | 0.269     | 0.447        | -0.184     | 0.271     | 0.455        | -0.190     | 0.297     | 0.488        | -0.184     | 0.299     | 0.485        | -0.191     | 0.307     | 0.498        | -0.189     | 0.339     | 0.528        | -0.189     | 0.357     | 0.546        | 0.1000 |
| 0.1500                     | -0.177     | 0.242     | 0.419        | -0.183     | 0.268     | 0.452        | -0.194     | 0.281     | 0.475        | -0.185     |           |              | -0.193     | 0.294     | 0.487        | -0.186     | 0.318     | 0.504        | -0.196     | 0.351     | 0.546        | 0.1500 |
| 0.2000                     | -0.163     | 0.217     | 0.380        | -0.179     | 0.267     | 0.447        | -0.193     | 0.309     | 0.502        | -0.186     |           |              | -0.191     | 0.267     | 0.458        | -0.189     | 0.288     | 0.477        | -0.182     | 0.332     | 0.514        | 0.2000 |
| 0.3000                     | -0.152     | 0.210     | 0.362        | -0.174     | 0.262     | 0.437        | -0.186     | 0.256     | 0.443        |            |           |              | -0.187     | 0.255     | 0.443        | -0.192     | 0.271     | 0.463        | -0.193     | 0.312     | 0.505        | 0.3000 |
| 0.4000                     | -0.142     | 0.217     | 0.359        | -0.167     | 0.240     | 0.408        | -0.185     | 0.236     | 0.421        |            |           |              | -0.189     | 0.234     | 0.423        | -0.192     | 0.256     | 0.449        | -0.196     | 0.295     | 0.490        | 0.4000 |
| 0.5000                     | -0.141     | 0.203     | 0.344        | -0.162     | 0.218     | 0.380        | -0.174     | 0.221     | 0.395        |            |           |              | -0.186     | 0.219     | 0.405        | -0.195     | 0.243     | 0.438        | -0.199     | 0.280     | 0.478        | 0.5000 |
| 0.6000                     |            | 0.206     |              | -0.149     | 0.213     | 0.363        | -0.172     | 0.213     | 0.385        |            |           |              | -0.179     | 0.210     | 0.389        | -0.195     | 0.232     | 0.426        | -0.197     | 0.269     | 0.466        | 0.6000 |
| 0.7000                     | -0.070     |           |              | -0.142     | 0.201     | 0.343        | -0.166     | 0.204     | 0.370        |            |           |              | -0.172     | 0.197     | 0.369        | -0.194     | 0.221     | 0.415        | -0.194     | 0.261     | 0.455        | 0.7000 |
| 0.8000                     | -0.107     | 0.176     | 0.283        | -0.139     | 0.194     | 0.332        | -0.160     | 0.196     | 0.355        |            |           |              | -0.164     | 0.192     | 0.356        | -0.193     | 0.209     | 0.402        | -0.192     | 0.260     | 0.452        | 0.8000 |
| 0.9000                     | -0.124     | 0.181     | 0.305        | -0.133     | 0.192     | 0.325        | -0.158     | 0.183     | 0.340        |            |           |              | -0.157     | 0.193     | 0.350        | -0.192     | 0.194     | 0.386        | -0.190     | 0.265     | 0.454        | 0.9000 |
| 1.0000                     | -0.120     | 0.200     | 0.320        | -0.125     | 0.196     | 0.320        | -0.160     | 0.166     | 0.326        |            |           |              |            |           |              |            |           |              |            |           |              | 1.0000 |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$

| x/c                        | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                            | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.697      α = -0.4.42 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                     | 0.277           | -0.969          | -1.246          | 0.244           | -1.244          | -1.487          | 0.209           | -0.692          | -0.901          |                 |                 |                 | 0.241           | -0.717          | -0.957          | 0.209           | -0.652          | -0.861          | 0.166           | -0.586          |                 | 0.0000 |
| 0.0125                     | 0.214           | -0.515          | -0.730          | 0.202           | -0.710          | -0.912          | 0.187           | -0.714          | -0.901          | 0.173           | -0.728          | -0.901          | 0.190           | -0.789          | -0.979          | 0.187           | -0.651          | -0.837          | 0.173           |                 |                 | 0.0125 |
| 0.0250                     | 0.167           | -0.244          | -0.411          | 0.167           | -0.373          | -0.540          | 0.167           | -0.672          | -0.839          | 0.143           | -0.446          | -0.589          | 0.152           | -0.773          | -0.926          |                 | -0.651          |                 | 0.171           |                 |                 | 0.0250 |
| 0.0420                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                     | 0.121           | -0.246          | -0.367          | 0.118           | -0.288          | -0.406          | 0.135           | -0.395          | -0.530          |                 | -0.368          |                 | 0.118           | -0.480          | -0.598          | 0.132           | -0.658          | -0.790          | 0.142           | -0.549          |                 | 0.0500 |
| 0.0640                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                     | 0.099           | -0.227          | -0.327          | 0.087           | -0.255          | -0.342          | 0.080           | -0.299          | -0.380          | 0.070           |                 |                 | 0.087           | -0.334          | -0.421          | 0.105           | -0.670          | -0.775          | 0.121           | -0.544          |                 | 0.0750 |
| 0.0810                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                     | 0.076           | -0.217          | -0.292          | 0.068           | -0.236          | -0.305          | 0.063           | -0.265          | -0.328          | 0.051           | -0.300          | -0.351          | 0.065           | -0.285          | -0.350          | 0.086           | -0.689          | -0.775          | 0.108           | -0.548          | -0.656          | 0.1000 |
| 0.1500                     | 0.051           | -0.192          | -0.243          | 0.046           | -0.206          | -0.251          | 0.040           | -0.244          | -0.284          | 0.029           | -0.268          | -0.296          | 0.044           | -0.264          | -0.308          | 0.063           | -0.655          | -0.718          | 0.087           | -0.549          | -0.636          | 0.1500 |
| 0.2000                     | 0.032           | -0.183          | -0.215          | 0.033           | -0.189          | -0.222          | 0.026           | -0.213          | -0.239          | 0.020           |                 |                 | 0.032           | -0.245          | -0.277          | 0.050           | -0.514          | -0.564          | 0.065           | -0.551          | -0.616          | 0.2000 |
| 0.3000                     | 0.008           | -0.179          | -0.187          | 0.006           | -0.180          | -0.185          | 0.007           | -0.203          | -0.209          |                 |                 |                 | 0.014           | -0.218          | -0.232          | 0.041           | -0.206          | -0.247          | 0.040           | -0.564          | -0.604          | 0.3000 |
| 0.4000                     | -0.001          | -0.174          | -0.173          | -0.002          | -0.170          | -0.168          | -0.005          | -0.194          | -0.189          |                 |                 |                 | 0.006           | -0.199          | -0.205          | 0.040           | -0.175          | -0.215          | 0.016           | -0.575          | -0.592          | 0.4000 |
| 0.5000                     | -0.011          | -0.160          | -0.150          | -0.003          | -0.162          | -0.159          | -0.005          | -0.183          | -0.177          |                 |                 |                 | 0.006           | -0.176          | -0.182          | 0.006           | -0.158          | -0.163          | 0.004           | -0.553          | -0.557          | 0.5000 |
| 0.6000                     |                 | -0.146          |                 | 0.003           | -0.148          | -0.151          | -0.005          | -0.168          | -0.162          |                 |                 |                 | 0.019           | -0.156          | -0.175          | -0.032          | -0.145          | -0.114          | -0.006          | -0.496          | -0.490          | 0.6000 |
| 0.7000                     | -0.003          |                 |                 | -0.001          | -0.126          | -0.125          | -0.003          | -0.133          | -0.130          |                 |                 |                 | 0.009           | -0.136          | -0.145          | -0.049          | -0.118          | -0.069          | -0.014          | -0.382          | -0.368          | 0.7000 |
| 0.8000                     | -0.016          | -0.099          | -0.083          | -0.010          | -0.095          | -0.085          | -0.016          | -0.113          | -0.097          |                 |                 |                 | -0.004          | -0.100          | -0.096          | -0.047          | -0.090          | -0.043          | -0.018          | -0.230          | -0.212          | 0.8000 |
| 0.9000                     | -0.012          | -0.051          | -0.038          | -0.008          | -0.044          | -0.039          | -0.020          | -0.058          | -0.038          |                 |                 |                 | -0.011          | -0.045          | -0.035          | -0.028          | -0.048          | -0.020          | -0.034          | -0.094          | -0.060          | 0.9000 |
| 1.0000                     | -0.008          | 0.014           | 0.006           | 0.013           | 0.027           | 0.014           | -0.016          | 0.032           | 0.048           |                 |                 |                 | -0.010          | 0.029           | 0.040           | 0.010           | 0.009           | -0.001          | -0.061          | 0.026           | 0.087           | 1.0000 |
| M = 0.696      α = -0.0.06 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                     | 0.278           | -0.825          | -1.103          | 0.276           | -1.137          | -1.413          | 0.272           | -1.131          | -1.404          |                 |                 |                 | -0.012          | -0.063          | -0.051          | -0.107          | 0.021           | 0.128           | -0.146          | -0.086          |                 | 0.0000 |
| 0.0125                     | 0.198           | -0.439          | -0.637          | 0.206           | -0.681          | -0.887          | 0.185           | -0.702          | -0.887          | 0.067           | -0.292          | -0.359          | -0.040          | -0.081          | -0.051          | -0.107          | 0.021           | 0.128           | -0.146          | -0.086          |                 | 0.0125 |
| 0.0250                     | 0.139           | -0.208          | -0.347          | 0.150           | -0.382          | -0.533          | 0.116           | -0.423          | -0.539          | 0.006           | -0.231          | -0.237          | -0.061          | -0.094          | -0.033          | -0.113          | -0.025          | 0.088           | -0.135          |                 |                 | 0.0250 |
| 0.0420                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                     | 0.083           | -0.213          | -0.296          | 0.082           | -0.261          | -0.342          | 0.031           | -0.319          | -0.350          |                 | -0.200          |                 | -0.084          | -0.104          | -0.020          | -0.126          | -0.086          | 0.040           | -0.133          | -0.079          |                 | 0.0500 |
| 0.0640                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                     | 0.056           | -0.190          | -0.246          | 0.034           | -0.208          | -0.241          | -0.011          | -0.257          | -0.246          | -0.066          |                 |                 | -0.098          | -0.107          | -0.009          | -0.132          | -0.090          | 0.042           | -0.132          | -0.081          |                 | 0.0750 |
| 0.0810                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                     | 0.028           | -0.169          | -0.197          | 0.002           | -0.174          | -0.176          | -0.038          | -0.214          | -0.176          | -0.083          | -0.152          | -0.069          | -0.106          | -0.108          | -0.002          | -0.125          | -0.097          | 0.028           | -0.127          | -0.085          | 0.042           | 0.1000 |
| 0.1500                     | -0.010          | -0.131          | -0.121          | -0.040          | -0.136          | -0.096          | -0.063          | -0.174          | -0.111          | -0.092          | -0.139          | -0.047          | -0.104          | -0.106          | -0.002          | -0.119          | -0.097          | 0.022           | -0.122          | -0.083          | 0.039           | 0.1500 |
| 0.2000                     | -0.040          | -0.107          | -0.067          | -0.058          | -0.118          | -0.059          | -0.077          | -0.156          | -0.079          | -0.097          |                 |                 | -0.100          | -0.104          | -0.004          | -0.110          | -0.097          | 0.013           | -0.119          | -0.090          | 0.029           | 0.2000 |
| 0.3000                     | -0.087          | -0.096          | -0.008          | -0.091          | -0.105          | -0.014          | -0.103          | -0.146          | -0.043          |                 |                 |                 | -0.101          | -0.099          | 0.001           | -0.087          | -0.101          | -0.015          | -0.112          | -0.092          | 0.019           | 0.3000 |
| 0.4000                     | -0.093          | -0.099          | -0.006          | -0.095          | -0.094          | 0.001           | -0.101          | -0.133          | -0.032          |                 |                 |                 | -0.098          | -0.095          | 0.004           | -0.052          | -0.097          | -0.044          | -0.109          | -0.087          | 0.021           | 0.4000 |
| 0.5000                     | -0.097          | -0.092          | 0.005           | -0.077          | -0.086          | -0.010          | -0.084          | -0.120          | -0.037          |                 |                 |                 | -0.084          | -0.090          | -0.006          | -0.055          | -0.084          | -0.028          | -0.096          | -0.079          | 0.016           | 0.5000 |
| 0.6000                     |                 | -0.088          |                 | -0.078          | -0.079          | -0.002          | -0.083          | -0.110          | -0.027          |                 |                 |                 | -0.064          | -0.088          | -0.024          | -0.071          | -0.078          | -0.008          | -0.083          | -0.073          | 0.010           | 0.6000 |
| 0.7000                     | -0.077          |                 |                 | -0.067          | 0.022           | -0.083          | -0.068          | 0.015           | -0.092          | -0.087          | 0.006           |                 | -0.087          | -0.077          | 0.010           | -0.077          | 0.064           | 0.012           | -0.066          | -0.061          | 0.006           | 0.7000 |
| 0.8000                     | -0.088          | -0.067          | 0.022           | -0.063          | -0.035          | 0.028           | -0.081          | -0.047          | 0.033           |                 |                 |                 | -0.108          | -0.065          | 0.043           | -0.064          | -0.052          | 0.013           | -0.045          | -0.042          | 0.003           | 0.8000 |
| 0.9000                     | -0.067          | -0.036          | 0.031           | -0.063          | -0.035          | 0.028           | -0.081          | -0.047          | 0.033           |                 |                 |                 | -0.069          | -0.031          | 0.037           | -0.035          | -0.030          | 0.005           | -0.034          | -0.012          | 0.022           | 0.9000 |
| 1.0000                     | -0.014          | 0.007           | 0.021           | -0.017          | 0.018           | 0.035           | -0.048          | 0.008           | 0.056           |                 |                 |                 | 0.030           | 0.023           | -0.007          | 0.013           | 0.001           | -0.012          | -0.033          | 0.029           | 0.062           | 1.0000 |
| M = 0.701      α = 0.3.68  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                     | 0.220           | -0.726          | -0.947          | 0.197           | -1.294          | -1.491          | 0.060           | -0.554          | -0.614          |                 |                 |                 | -0.434          | -0.124          | 0.309           | -0.656          | 0.179           | 0.835           | -0.516          | 0.164           |                 | 0.0000 |
| 0.0125                     | 0.185           | -0.422          | -0.606          | 0.231           | -0.913          | -1.144          | 0.113           | -0.769          | -0.882          | -0.246          | -0.239          | 0.007           | -0.399          | -0.039          | 0.359           | -0.654          | 0.171           | 0.825           | -0.523          |                 |                 | 0.0125 |
| 0.0250                     | 0.159           | -0.237          | -0.396          | 0.239           | -0.621          | -0.860          | 0.124           | -0.798          | -0.921          | -0.256          | -0.204          | 0.051           | -0.373          | 0.016           | 0.389           |                 | 0.159           |                 | -0.528          |                 |                 | 0.0250 |
| 0.0420                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                     | 0.136           | -0.230          | -0.365          | 0.175           | -0.304          | -0.479          | 0.017           | -0.298          | -0.316          |                 | -0.080          |                 | -0.348          | 0.037           | 0.385           | -0.654          | 0.124           | 0.777           | -0.528          | 0.154           |                 | 0.0500 |
| 0.0640                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                     | 0.116           | -0.219          | -0.335          | 0.087           | -0.212          | -0.299          | -0.065          | -0.070          | -0.006          | -0.293          |                 |                 | -0.327          | 0.050           | 0.377           | -0.659          | 0.097           | 0.756           | -0.528          | 0.139           |                 | 0.0750 |
| 0.0810                     |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                     | 0.076           | -0.198          | -0.274          | 0.017           | -0.160          | -0.177          | -0.121          | -0.066          | 0.055           | -0.298          | 0.022           | 0.320           | -0.316          | 0.048           | 0.364           | -0.640          | 0.078           | 0.718           | -0.526          | 0.113           | 0.639           | 0.1000 |
| 0.1500                     | -0.007          | -0.128          | -0.121          | -0.084          | -0.091          | -0.007          | -0.173          | -0.043          | 0.130           | -0.281          | 0.030           | 0.311           | -0.301          | 0.034           | 0.335           | -0.542          | 0.054           | 0.596           | -0.527          | 0.094           | 0.621           | 0.1500 |
| 0.2000                     | -0.079          | -0.078          | 0.002           | -0.134          | -0.046          | 0.088           | -0.182          | -0.020          | 0.162           | -0.264          |                 |                 | -0.270          | 0.022           | 0.292           | -0.364          | 0.038           | 0.402           | -0.533          | 0.073           | 0.606           | 0.2000 |
| 0.3000                     | -0.164          | -0.022          | 0.142           | -0.173          | -0.006          | 0.167           | -0.196          | -0.004          | 0.192           |                 |                 |                 | -0.247          | 0.001           | 0.248           | -0.173          | 0.015           | 0.187           | -0.541          | 0.045           | 0.586           | 0.3000 |
| 0.4000                     | -0.164          | -0.010          | 0.154           | -0.167          | -0.009          | 0.158           | -0.190          | -0.017          | 0.173           |                 |                 |                 | -0.231          | -0.008          | 0.223           | -0.131          | -0.001          | 0.130           | -0.544          | 0.028           | 0.572           | 0.4000 |
| 0.5000                     | -0.158          | -0.012          | 0.146           | -0.150          | -0.016          | 0.134           | -0.161          | -0.020          | 0.141           |                 |                 |                 | -0.213          | -0.014          | 0.199           | -0.141          | 0.001           | 0.141           | -0.501          | 0.017           | 0.518           | 0.5000 |
| 0.6000                     |                 | -0.022          |                 | -0.125          | -0.024          | 0.101           | -0.150          | -0.027          | 0.123           |                 |                 |                 | -0.176          | -0.023          | 0.184           | -0.134          | -0.013          | 0.121           | -0.421          | 0.004           | 0.425           | 0.6000 |
| 0.7000                     | -0.116          | -0.026          | 0.089           | -0.115          | -0.024          | 0.091           | -0.132          | -0.031          | 0.103           |                 |                 |                 | -0.143          | -0.026          | 0.117           | -0.119          | -0.011          | 0.109           | -0.316          | -0.001          | 0.315           | 0.7000 |
| 0.8000                     | -0.114          | -0.026          | 0.089           | -0.110          | -0.021          | 0.089           | -0.124          | -0.030          | 0.094           |                 |                 |                 | -0.159          | -0.026          | 0.133           | -0.091          | -0.016          | 0.075           | -0.188          | -0.006          | 0.183           | 0.8000 |
| 0.9000                     | -0.086          | -0.010          | 0.077           | -0.083          | -0.003          | 0.080           | <               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

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| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.699      α = 07.71 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.050           | -0.099          | -0.148          | -0.142          | -0.090          | 0.052           | -0.312          | -0.149          | 0.162           | -0.721          | 0.048           | 0.769           | -0.574          | 0.012           | 0.586           | -0.653          | 0.040           | 0.693           | -0.684          | 0.194           |                 | 0.0000 |
| 0.0125                   | 0.003           | -0.048          | -0.051          | -0.153          | -0.039          | 0.114           | -0.318          | -0.031          | 0.287           | -0.721          | 0.048           | 0.769           | -0.599          | 0.140           | 0.738           | -0.653          | 0.130           | 0.783           | -0.693          |                 |                 | 0.0125 |
| 0.0250                   | -0.034          | -0.016          | 0.018           | -0.166          | 0.000           | 0.166           | -0.326          | 0.052           | 0.379           | -0.618          | 0.145           | 0.763           | -0.616          | 0.213           | 0.829           |                 | 0.185           |                 | -0.698          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.080          | -0.007          | 0.073           | -0.195          | 0.041           | 0.236           | -0.350          | 0.114           | 0.464           |                 | 0.178           |                 | -0.629          | 0.199           | 0.828           | -0.654          | 0.188           | 0.842           | -0.695          | 0.167           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.114          | 0.011           | 0.126           | -0.240          | 0.070           | 0.311           | -0.379          | 0.131           | 0.510           | -0.390          |                 |                 | -0.629          | 0.174           | 0.802           | -0.655          | 0.179           | 0.834           | -0.697          | 0.170           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.156          | 0.032           | 0.188           | -0.272          | 0.085           | 0.356           | -0.397          | 0.141           | 0.538           | -0.481          | 0.154           | 0.635           | -0.591          | 0.151           | 0.742           | -0.663          | 0.170           | 0.833           | -0.701          | 0.172           | 0.873           | 0.1000 |
| 0.1500                   | -0.224          | 0.065           | 0.289           | -0.319          | 0.100           | 0.419           | -0.418          | 0.126           | 0.543           | -0.477          | 0.116           | 0.593           | -0.516          | 0.123           | 0.639           | -0.665          | 0.143           | 0.808           | -0.704          | 0.162           | 0.866           | 0.1500 |
| 0.2000                   | -0.262          | 0.077           | 0.339           | -0.335          | 0.095           | 0.430           | -0.424          | 0.112           | 0.536           | -0.468          |                 |                 | -0.481          | 0.107           | 0.588           | -0.691          | 0.122           | 0.813           | -0.709          | 0.142           | 0.851           | 0.2000 |
| 0.3000                   | -0.312          | 0.063           | 0.375           | -0.345          | 0.072           | 0.417           | -0.413          | 0.071           | 0.485           |                 |                 |                 | -0.437          | 0.077           | 0.514           | -0.733          | 0.101           | 0.834           | -0.702          | 0.119           | 0.821           | 0.3000 |
| 0.4000                   | -0.275          | 0.046           | 0.321           | -0.311          | 0.055           | 0.367           | -0.381          | 0.053           | 0.434           |                 |                 |                 | -0.405          | 0.067           | 0.472           | -0.760          | 0.075           | 0.835           | -0.696          | 0.095           | 0.791           | 0.4000 |
| 0.5000                   | -0.245          | 0.038           | 0.284           | -0.266          | 0.039           | 0.305           | -0.331          | 0.046           | 0.378           |                 |                 |                 | -0.358          | 0.050           | 0.408           | -0.729          | 0.064           | 0.793           | -0.668          | 0.071           | 0.739           | 0.5000 |
| 0.6000                   |                 | 0.024           |                 | -0.205          | 0.025           | 0.231           | -0.274          | 0.030           | 0.304           |                 |                 |                 | -0.245          | 0.034           | 0.278           | -0.541          | 0.039           | 0.580           | -0.665          | 0.039           | 0.684           | 0.6000 |
| 0.7000                   | -0.129          |                 |                 | -0.143          | 0.014           | 0.157           | -0.195          | 0.023           | 0.217           |                 |                 |                 | -0.100          | 0.022           | 0.121           | -0.328          | 0.035           | 0.363           | -0.629          | 0.014           | 0.642           | 0.7000 |
| 0.8000                   | -0.093          | 0.000           | 0.093           | -0.098          | 0.006           | 0.104           | -0.143          | 0.013           | 0.156           |                 |                 |                 | -0.084          | 0.011           | 0.096           | -0.160          | 0.003           | 0.163           | -0.596          | -0.018          | 0.578           | 0.8000 |
| 0.9000                   | -0.066          | 0.001           | 0.067           | -0.076          | 0.011           | 0.087           | -0.119          | 0.005           | 0.125           |                 |                 |                 | -0.067          | 0.012           | 0.079           | -0.039          | -0.002          | 0.037           | -0.536          | -0.083          | 0.453           | 0.9000 |
| 1.0000                   | -0.047          | 0.011           | 0.058           | -0.077          | 0.030           | 0.107           | -0.125          | -0.001          | 0.124           |                 |                 |                 | -0.049          | 0.023           | 0.072           | 0.035           | 0.022           | -0.014          | -0.449          | -0.182          | 0.267           | 1.0000 |
| M = 0.700      α = 11.74 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.418          | 0.164           | 0.582           | -0.867          | 0.090           | 0.957           | -0.971          | 0.014           | 0.985           | -1.060          | -0.041          | 1.019           | -0.954          | -0.077          | 0.878           | -0.891          | 0.076           |                 |                 |                 |                 | 0.0000 |
| 0.0125                   | -0.319          | 0.178           | 0.497           | -0.571          | 0.146           | 0.718           | -1.159          | 0.118           | 1.277           | -1.062          | 0.072           | 1.134           | -1.040          | 0.096           | 1.136           | -0.937          | 0.018           | 0.955           | -0.891          |                 |                 | 0.0125 |
| 0.0250                   | -0.261          | 0.184           | 0.445           | -0.390          | 0.183           | 0.573           | -1.157          | 0.184           | 1.341           | -1.145          |                 | 1.334           | -1.046          | 0.185           | 1.231           |                 | 0.095           |                 | -0.906          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.266          | 0.172           | 0.438           | -0.371          | 0.194           | 0.565           | -0.582          | 0.204           | 0.786           |                 | 0.211           |                 | -1.140          | 0.214           | 1.354           | -0.931          | 0.194           | 1.125           | -0.916          | 0.152           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.281          | 0.170           | 0.451           | -0.371          | 0.195           | 0.565           | -0.456          | 0.207           | 0.663           | -1.163          |                 |                 | -1.166          | 0.240           | 1.406           | -0.965          | 0.216           | 1.182           | -0.923          | 0.152           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.311          | 0.172           | 0.484           | -0.381          | 0.189           | 0.570           | -0.456          | 0.203           | 0.658           | -0.760          | 0.212           | 0.972           | -1.385          | 0.229           | 1.614           | -1.009          | 0.227           | 1.236           | -0.927          | 0.173           | 1.110           | 0.1000 |
| 0.1500                   | -0.362          | 0.177           | 0.539           | -0.406          | 0.185           | 0.591           | -0.455          | 0.195           | 0.650           | -0.537          | 0.203           | 0.740           | -1.012          | 0.213           | 1.225           | -1.009          | 0.222           | 1.230           | -0.931          | 0.187           | 1.118           | 0.1500 |
| 0.2000                   | -0.386          | 0.170           | 0.556           | -0.423          | 0.176           | 0.599           | -0.462          | 0.190           | 0.652           | -0.510          |                 |                 | -0.669          | 0.199           | 0.868           | -0.978          | 0.200           | 1.179           | -0.933          | 0.190           | 1.123           | 0.2000 |
| 0.3000                   | -0.447          | 0.149           | 0.596           | -0.446          | 0.160           | 0.606           | -0.463          | 0.170           | 0.632           |                 |                 |                 | -0.490          | 0.176           | 0.666           | -1.039          | 0.176           | 1.215           | -0.957          | 0.175           | 1.132           | 0.3000 |
| 0.4000                   | -0.424          | 0.128           | 0.552           | -0.419          | 0.139           | 0.558           | -0.440          | 0.141           | 0.580           |                 |                 |                 | -0.427          | 0.154           | 0.581           | -1.467          | 0.143           | 1.610           | -0.982          | 0.144           | 1.126           | 0.4000 |
| 0.5000                   | -0.384          | 0.116           | 0.500           | -0.369          | 0.119           | 0.489           | -0.387          | 0.117           | 0.509           |                 |                 |                 | -0.401          | 0.120           | 0.521           | -1.361          | 0.125           | 1.486           | -0.917          | 0.124           | 1.041           | 0.5000 |
| 0.6000                   |                 | 0.094           |                 | -0.296          | 0.094           | 0.389           | -0.318          | 0.097           | 0.415           |                 |                 |                 | -0.184          | 0.102           | 0.286           | -0.682          | 0.098           | 0.780           | -0.854          | 0.078           | 0.932           | 0.6000 |
| 0.7000                   | -0.220          |                 |                 | -0.207          | 0.074           | 0.281           | -0.178          | 0.078           | 0.256           |                 |                 |                 | -0.068          | 0.075           | 0.123           | -0.381          | 0.077           | 0.458           | -0.801          | 0.041           | 0.862           | 0.7000 |
| 0.8000                   | -0.152          | 0.047           | 0.199           | -0.133          | 0.054           | 0.187           | -0.139          | 0.053           | 0.191           |                 |                 |                 | -0.060          | 0.066           | 0.126           | -0.161          | 0.034           | 0.195           | -0.716          | -0.010          | 0.706           | 0.8000 |
| 0.9000                   | -0.097          | 0.032           | 0.129           | -0.089          | 0.045           | 0.134           | -0.107          | 0.040           | 0.147           |                 |                 |                 | -0.059          | 0.046           | 0.105           | -0.009          | 0.012           | 0.021           | -0.605          | -0.115          | 0.490           | 0.9000 |
| 1.0000                   | -0.056          | 0.022           | 0.079           | -0.075          | 0.047           | 0.123           | -0.083          | 0.040           | 0.124           |                 |                 |                 | -0.044          | 0.016           | 0.061           | 0.074           | 0.011           | -0.063          | -0.466          | -0.275          | 0.192           | 1.0000 |
| M = 0.699      α = 15.76 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -2.598          | 0.180           | 2.778           | -1.122          | 0.024           | 1.146           | -1.341          | -0.156          | 1.184           | -1.363          | -0.274          | 1.090           | -1.151          | -0.316          | 0.836           | -0.558          | -0.098          |                 |                 |                 |                 | 0.0000 |
| 0.0125                   | -1.377          | 0.280           | 1.657           | -1.418          | 0.171           | 1.588           | -1.418          | 0.078           | 1.497           | -1.377          | -0.002          | 1.375           | -1.134          | -0.104          | 1.030           | -0.574          |                 |                 |                 |                 | 0.0125          |        |
| 0.0250                   | -0.626          | 0.341           | 0.967           | -1.570          | 0.266           | 1.836           | -1.485          | 0.229           | 1.714           | -1.424          | 0.195           | 1.618           | -1.399          | 0.178           | 1.577           | -0.984          |                 |                 |                 |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.537          | 0.340           | 0.877           | -1.442          | 0.304           | 1.746           | -1.584          | 0.276           | 1.860           |                 | 0.280           |                 | -1.463          | 0.264           | 1.728           | -1.121          | 0.182           | 1.302           | -0.591          | 0.128           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.523          | 0.331           | 0.853           | -0.719          | 0.311           | 1.030           | -1.643          | 0.299           | 1.942           | -1.546          |                 |                 | -1.449          | 0.292           | 1.741           | -1.144          | 0.234           | 1.378           | -0.611          | 0.176           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.537          | 0.321           | 0.858           | -0.572          | 0.306           | 0.878           | -1.278          | 0.300           | 1.579           | -1.595          | 0.292           | 1.888           | -1.445          | 0.302           | 1.747           | -1.179          | 0.264           | 1.443           | -0.612          | 0.195           | 0.807           | 0.1000 |
| 0.1500                   | -0.565          | 0.307           | 0.872           | -0.576          | 0.299           | 0.874           | -0.713          | 0.295           | 1.008           | -1.394          | 0.294           | 1.688           | -1.768          | 0.297           | 2.065           | -1.173          | 0.271           | 1.444           | -0.643          | 0.204           | 0.847           | 0.1500 |
| 0.2000                   | -0.560          | 0.287           | 0.847           | -0.582          | 0.287           | 0.869           | -0.636          | 0.290           | 0.924           | -0.910          |                 |                 | -1.494          | 0.283           | 1.778           | -1.086          | 0.267           | 1.354           | -0.695          | 0.211           | 0.906           | 0.2000 |
| 0.3000                   | -0.602          | 0.251           | 0.854           | -0.587          | 0.263           | 0.850           | -0.602          | 0.258           | 0.861           |                 |                 |                 | -0.844          | 0.257           | 1.100           | -0.919          | 0.247           | 1.166           | -0.779          | 0.198           | 0.977           | 0.3000 |
| 0.4000                   | -0.544          | 0.218           | 0.762           | -0.540          | 0.235           | 0.775           | -0.553          | 0.233           | 0.786           |                 |                 |                 | -0.604          | 0.233           | 0.836           | -0.997          | 0.205           | 1.202           | -0.828          | 0.163           | 0.991           | 0.4000 |
| 0.5000                   | -0.473          | 0.194           | 0.668           | -0.459          | 0.204           | 0.663           | -0.461          | 0.201           | 0.662           |                 |                 |                 | -0.452          | 0.199           | 0.651           | -0.987          | 0.189           | 1.176           | -0.829          | 0.139           | 0.967           | 0.5000 |
| 0.6000                   |                 | 0.163           |                 | -0.346          | 0.172           | 0.518           | -0.361          | 0.166           | 0.527           |                 |                 |                 | -0.168          | 0.168           | 0.336           | -0.996          | 0.144           | 1.140           | -0.789          | 0.096           | 0.885           | 0.6000 |
| 0.7000                   | -0.230          |                 |                 | -0.213          | 0.137           | 0.350           | -0.167          | 0.137           | 0.304           |                 |                 |                 | 0.027           | 0.128           | 0.101           | -1.060          | 0.113           | 1.173           | -0.722          | 0.060           | 0.782           | 0.7000 |
| 0.8000                   | -0.130          | 0.088           | 0.238           | -0.127          | 0.099           | 0.226           | -0.112          | 0.094           | 0.204           |                 |                 |                 | -0.060          | 0.091           | 0.151           | -1.055          | 0.057           | 1.112           | -0.664          | -0.009          | 0.672           | 0.8000 |
| 0.9000                   | -0.111          | 0.049           | 0.160           | -0.100          | 0.067           | 0.167           | -0.102          | 0.060           | 0.162           |                 |                 |                 | -0.083          | 0.059           | 0.143           | -1.020          | 0.011           | 1.              |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

| x/c                     | 2y/b=0.200      |                 |                 | 2y/b=0.250      |                 |                 | 2y/b=0.300      |                 |                 | 2y/b=0.350      |                 |                 | 2y/b=0.400      |                 |                 | 2y/b=0.600      |                 |                 | 2y/b=0.800      |                 |                 | x/c    |
|-------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                         | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.903      α = 0.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                  | 0.245           | -0.984          | -1.229          | 0.210           | -0.867          | -1.077          | 0.245           | -0.765          | -1.009          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0125                  | 0.192           | -0.520          | -0.712          | 0.234           | -0.940          | -1.174          | 0.257           | -0.799          | -1.056          | -0.071          | -0.265          | -0.195          | -0.388          | -0.094          | 0.294           | -0.712          | 0.146           | 0.858           | -0.575          | 0.156           | 0.0000          |        |
| 0.0250                  | 0.154           | -0.245          | -0.399          | 0.238           | -0.887          | -1.124          | 0.237           | -0.794          | -1.030          | -0.098          | -0.228          | -0.130          | -0.349          | -0.080          | 0.269           | -0.715          | 0.124           | 0.852           | -0.583          |                 | 0.0125          |        |
| 0.0420                  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0250          |        |
| 0.0500                  | 0.127           | -0.259          | -0.386          | 0.185           | -0.402          | -0.587          | 0.099           | -0.661          | -0.760          |                 | -0.198          |                 | -0.338          | -0.062          | 0.276           | -0.722          | 0.084           | 0.806           | -0.589          | 0.123           | 0.0420          |        |
| 0.0640                  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0500          |        |
| 0.0750                  | 0.118           | -0.265          | -0.383          | 0.111           | -0.292          | -0.403          | -0.021          | -0.212          | -0.191          | -0.228          |                 |                 | -0.333          | -0.037          | 0.296           | -0.726          | 0.056           | 0.782           | -0.590          | 0.106           | 0.0640          |        |
| 0.0810                  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0750          |        |
| 0.1000                  | 0.091           | -0.257          | -0.348          | 0.042           | -0.232          | -0.273          | -0.096          | -0.117          | -0.021          | -0.251          | -0.115          | 0.137           | -0.331          | -0.027          | 0.304           | -0.717          | 0.046           | 0.762           | -0.592          | 0.093           | 0.0810          |        |
| 0.1500                  | 0.017           | -0.197          | -0.215          | -0.079          | -0.136          | -0.057          | -0.187          | -0.106          | 0.081           | -0.271          | -0.078          | 0.192           | -0.324          | -0.017          | 0.308           | -0.645          | 0.020           | 0.665           | -0.593          | 0.081           | 0.1500          |        |
| 0.2000                  | -0.069          | -0.137          | -0.068          | -0.158          | -0.110          | 0.048           | -0.222          | -0.047          | 0.175           | -0.284          |                 |                 | -0.315          | -0.015          | 0.300           | -0.536          | 0.004           | 0.540           | -0.596          | 0.063           | 0.2000          |        |
| 0.3000                  | -0.221          | -0.075          | 0.146           | -0.235          | -0.046          | 0.188           | -0.259          | -0.044          | 0.215           |                 |                 |                 | -0.300          | -0.025          | 0.275           | -0.281          | -0.010          | 0.271           | -0.600          | 0.048           | 0.3000          |        |
| 0.4000                  | -0.237          | -0.042          | 0.195           | -0.247          | -0.039          | 0.208           | -0.256          | -0.042          | 0.214           |                 |                 |                 | -0.287          | -0.034          | 0.253           | -0.157          | -0.028          | 0.129           | -0.634          | 0.017           | 0.4000          |        |
| 0.5000                  | -0.245          | -0.041          | 0.204           | -0.240          | -0.046          | 0.194           | -0.247          | -0.048          | 0.199           |                 |                 |                 | -0.263          | -0.045          | 0.218           | -0.171          | -0.032          | 0.138           | -0.640          | 0.004           | 0.5000          |        |
| 0.6000                  |                 | -0.050          |                 | -0.209          | -0.051          | 0.158           | -0.210          | -0.054          | 0.156           |                 |                 |                 | -0.226          | -0.050          | 0.176           | -0.192          | -0.034          | 0.158           | -0.611          | -0.003          | 0.6000          |        |
| 0.7000                  | -0.181          |                 |                 | -0.176          | -0.053          | 0.123           | -0.179          | -0.054          | 0.125           |                 |                 |                 | -0.208          | -0.053          | 0.155           | -0.207          | -0.039          | 0.168           | -0.529          | -0.009          | 0.7000          |        |
| 0.8000                  | -0.207          | -0.055          | 0.152           | -0.210          | -0.049          | 0.161           | -0.234          | -0.051          | 0.125           |                 |                 |                 | -0.273          | -0.049          | 0.224           | -0.169          | -0.037          | 0.132           | -0.390          | -0.019          | 0.8000          |        |
| 0.9000                  | -0.169          | -0.038          | 0.131           | -0.164          | -0.030          | 0.134           | -0.174          | -0.037          | 0.137           |                 |                 |                 | -0.173          | -0.029          | 0.144           | -0.077          | -0.027          | 0.049           | -0.218          | -0.018          | 0.9000          |        |
| 1.0000                  | -0.068          | -0.009          | 0.059           | -0.038          | 0.003           | 0.041           | -0.003          | -0.012          | -0.016          |                 |                 |                 | 0.090           | 0.006           | -0.085          | 0.072           | -0.009          | -0.080          | -0.011          | -0.009          | 1.0000          |        |
| M = 0.951      α = 0.82 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                  | 0.248           | -0.791          | -1.040          | 0.201           | -1.034          | -1.234          | 0.195           | -0.691          | -0.886          |                 |                 |                 | -0.219          | -0.121          | 0.098           | -0.714          | 0.151           | 0.865           | -0.691          | 0.080           | 0.0000          |        |
| 0.0125                  | 0.190           | -0.421          | -0.611          | 0.222           | -0.852          | -1.074          | 0.217           | -0.817          | -1.035          | -0.068          | -0.345          | -0.276          | -0.241          | -0.104          | 0.137           | -0.716          | 0.125           | 0.842           | -0.698          |                 | 0.0125          |        |
| 0.0250                  | 0.150           | -0.202          | -0.352          | 0.226           | -0.679          | -0.906          | 0.214           | -0.846          | -1.060          | -0.069          | -0.290          | -0.221          | -0.258          | -0.090          | 0.168           | -0.716          | 0.102           | 0.842           | -0.698          |                 | 0.0250          |        |
| 0.0420                  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                  | 0.126           | -0.220          | -0.346          | 0.185           | -0.360          | -0.545          | 0.130           | -0.607          | -0.737          |                 | -0.255          |                 | -0.277          | -0.073          | 0.204           | -0.724          | 0.063           | 0.788           | -0.702          | 0.075           | 0.0500          |        |
| 0.0640                  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                  | 0.122           | -0.237          | -0.359          | 0.128           | -0.299          | -0.426          | 0.053           | -0.208          | -0.262          | -0.175          |                 |                 | -0.290          | -0.043          | 0.248           | -0.730          | 0.037           | 0.767           | -0.702          | 0.061           | 0.0750          |        |
| 0.0810                  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                  | 0.098           | -0.243          | -0.342          | 0.071           | -0.271          | -0.342          | -0.030          | -0.133          | -0.102          | -0.210          | -0.089          | 0.122           | -0.300          | -0.030          | 0.269           | -0.696          | 0.023           | 0.720           | -0.702          | 0.032           | 0.1000          |        |
| 0.1500                  | 0.042           | -0.222          | -0.264          | -0.040          | -0.149          | -0.108          | -0.127          | -0.102          | 0.025           | -0.244          | -0.043          | 0.201           | -0.308          | -0.018          | 0.290           | -0.619          | 0.002           | 0.620           | -0.701          | 0.018           | 0.1500          |        |
| 0.2000                  | -0.036          | -0.154          | -0.118          | -0.128          | -0.109          | 0.019           | -0.186          | -0.057          | 0.129           | -0.281          |                 |                 | -0.308          | -0.016          | 0.293           | -0.507          | -0.022          | 0.485           | -0.701          | -0.001          | 0.2000          |        |
| 0.3000                  | -0.190          | -0.074          | 0.116           | -0.241          | -0.047          | 0.194           | -0.263          | -0.038          | 0.225           |                 |                 |                 | -0.311          | -0.033          | 0.278           | -0.339          | -0.044          | 0.294           | -0.720          | -0.031          | 0.3000          |        |
| 0.4000                  | -0.251          | -0.043          | 0.207           | -0.259          | -0.044          | 0.215           | -0.274          | -0.049          | 0.225           |                 |                 |                 | -0.315          | -0.056          | 0.258           | -0.301          | -0.065          | 0.236           | -0.742          | -0.054          | 0.4000          |        |
| 0.5000                  | -0.271          | -0.053          | 0.218           | -0.274          | -0.064          | 0.210           | -0.283          | -0.066          | 0.216           |                 |                 |                 | -0.321          | -0.074          | 0.247           | -0.245          | -0.075          | 0.170           | -0.764          | -0.061          | 0.5000          |        |
| 0.6000                  |                 | -0.077          |                 | -0.288          | -0.081          | 0.207           | -0.289          | -0.080          | 0.210           |                 |                 |                 | -0.275          | -0.086          | 0.188           | -0.254          | -0.088          | 0.166           | -0.767          | -0.066          | 0.6000          |        |
| 0.7000                  | -0.282          |                 |                 | -0.277          | -0.094          | 0.183           | -0.251          | -0.093          | 0.158           |                 |                 |                 | -0.265          | -0.099          | 0.166           | -0.268          | -0.094          | 0.174           | -0.726          | -0.066          | 0.7000          |        |
| 0.8000                  | -0.262          | -0.107          | 0.156           | -0.264          | -0.102          | 0.161           | -0.288          | -0.101          | 0.187           |                 |                 |                 | -0.354          | -0.106          | 0.248           | -0.305          | -0.093          | 0.212           | -0.560          | -0.065          | 0.8000          |        |
| 0.9000                  | -0.307          | -0.091          | 0.216           | -0.316          | -0.084          | 0.232           | -0.341          | -0.094          | 0.248           |                 |                 |                 | -0.374          | -0.082          | 0.292           | -0.295          | -0.076          | 0.219           | -0.321          | -0.051          | 0.9000          |        |
| 1.0000                  | -0.416          | -0.055          | 0.361           | -0.433          | -0.038          | 0.396           | -0.410          | -0.071          | 0.339           |                 |                 |                 | -0.326          | -0.027          | 0.299           | -0.239          | -0.043          | 0.196           | -0.009          | -0.025          | -0.016          | 1.0000 |
| M = 1.004      α = 0.93 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                  | 0.262           | -0.653          | -0.915          | 0.225           | -0.980          | -1.205          | 0.217           | -0.582          | -0.799          |                 |                 |                 | -0.092          | -0.046          | 0.046           | -0.603          | 0.195           | 0.798           | -0.624          | 0.132           | 0.0000          |        |
| 0.0125                  | 0.211           | -0.339          | -0.550          | 0.257           | -0.738          | -0.994          | 0.247           | -0.712          | -0.960          | -0.034          | -0.256          | -0.222          | -0.132          | -0.031          | 0.101           | -0.608          | 0.174           | 0.782           | -0.626          |                 | 0.0125          |        |
| 0.0250                  | 0.178           | -0.152          | -0.330          | 0.270           | -0.541          | -0.811          | 0.253           | -0.732          | -0.985          | -0.015          | -0.226          | -0.211          | -0.158          | -0.017          | 0.141           | -0.619          | 0.153           | 0.782           | -0.628          |                 | 0.0250          |        |
| 0.0420                  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                  | 0.167           | -0.163          | -0.330          | 0.243           | -0.282          | -0.525          | 0.188           | -0.441          | -0.629          |                 | -0.177          |                 | -0.169          | 0.010           | 0.178           | -0.619          | 0.112           | 0.731           | -0.631          | 0.113           | 0.0500          |        |
| 0.0640                  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                  | 0.174           | -0.174          | -0.348          | 0.191           | -0.225          | -0.417          | 0.104           | -0.118          | -0.222          | -0.089          |                 |                 | -0.193          | 0.036           | 0.228           | -0.621          | 0.084           | 0.705           | -0.633          | 0.097           | 0.0750          |        |
| 0.0810                  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                  | 0.159           | -0.177          | -0.336          | 0.142           | -0.192          | -0.333          | 0.048           | -0.025          | -0.073          |                 |                 |                 | -0.204          | 0.045           | 0.249           | -0.584          | 0.065           | 0.649           | -0.633          | 0.069           | 0.1000          |        |
| 0.1500                  | 0.113           | -0.148          | -0.262          | 0.040           | -0.066          | -0.107          | -0.055          | -0.018          | 0.037           | -0.155          | 0.042           | 0.197           | -0.221          | 0.055           | 0.276           | -0.505          | 0.040           | 0.545           | -0.633          | 0.051           | 0.1500          |        |
| 0.2000                  | 0.039           | -0.072          | -0.111          | -0.039          | -0.018          | 0.020           | -0.102          | 0.027           | 0.129           | -0.186          |                 |                 | -0.228          | 0.053           | 0.281           | -0.395          | 0.022           | 0.418           | -0.636          | 0.030           | 0.2000          |        |
| 0.3000                  | -0.098          | 0.008           | 0.107           | -0.148          | 0.032           | 0.180           | -0.169          | 0.029           | 0.198           |                 |                 |                 | -0.240          | 0.031           | 0.271           | -0.268          | -0.001          | 0.266           | -0.651          |                 | 0.3000          |        |
| 0.4000                  | -0.165          | 0.028           | 0.192           | -0.222          | -0.026          | 0.196           | -0.233          | -0.033          | 0.200           |                 |                 |                 | -0.251          | 0.009           | 0.260           | -0.251          | -0.025          | 0.225           | -0.680          | -0.027          | 0.4000          |        |
| 0.5000                  | -0.198          | 0.009           | 0.207           | -0.201          | -0.002          | 0.199           | -0.213          | -0.020          | 0.193           |                 |                 |                 | -0.261          | -0.016          | 0.245           | -0.204          | -0.034          | 0.170           | -0.687          | -0.039          | 0.5000          |        |
| 0.6000                  |                 | -0.022          |                 | -0.228          | -0.026          | 0.194           | -0.233          | -0.033          | 0.200           |                 |                 |                 | -0.229          | -0.039          | 0.190           | -0.221          | -0.052          | 0.169           | -0.675          | -0.050          | 0.6000          |        |
| 0.7000                  | -0.226          |                 |                 | -0.228          | -0.043          | 0.185           | -0.212          | -0.045          | 0.167           |                 |                 |                 | -0.216          | -0.059          | 0.156           | -0.232          | -0.064          | 0.168           | -0.628          | -0.055          | 0.7000          |        |
| 0.8000                  | -0.207          | -0.067          | 0.140           | -0.207          | -0.062          | 0.145           | -0.231          | -0.066          | 0.165           |                 |                 |                 | -0.294          | -0.070          | 0.223           | -0.269          | -0.080          | 0.189           | -0.485          | -0.068          | 0.8000          |        |
| 0.9000                  | -0.259          | -0.080          | 0.178           | -0.264          | -0.072          | 0.192           | -0.299          | -0.080          | 0.219           |                 |                 |                 | -0.340          | -0.080          | 0.261           | -0.297          | -0.087          | 0.172           | -0.297          | -0.061          | 0.9000          |        |
| 1.0000                  | -0.382          | -0.088          | 0.294           | -0.396          | -0.071          | 0.325           | -0.417          | -0.088          | 0.329           |                 |                 |                 | -0.356          | -0.087          | 0.269           | -0.201          | -0.085          | 0.116           | -0.061          | -0.034          | -0.027          | 1.0000 |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $0^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

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| x/c                       | 2y/b = 0.200             |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub>          | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pt</sub> | ΔC <sub>p</sub> |        |
|                           | M = 1.050      α = 03.93 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.236                    | -0.447          | -0.683          | 0.164           | -0.940          | -1.104          | 0.120           | -0.531          | -0.652          | -0.171          | -0.339          | -0.168          | -0.177          | -0.252          | -0.075          | -0.575          | 0.179           | 0.754           | -0.578          | 0.154           |                 | 0.0000 |
| 0.0125                    | 0.157                    | -0.269          | -0.426          | 0.182           | -0.639          | -0.821          | 0.157           | -0.707          | -0.864          | -0.131          | -0.334          | -0.203          | -0.187          | -0.148          | 0.039           | -0.578          | 0.152           | 0.730           | -0.579          |                 |                 | 0.0125 |
| 0.0250                    | 0.104                    | -0.163          | -0.267          | 0.188           | -0.427          | -0.615          | 0.169           | -0.732          | -0.902          | -0.131          | -0.334          | -0.203          | -0.197          | -0.079          | 0.118           |                 | 0.127           |                 | -0.580          |                 |                 | 0.0250 |
| 0.0420                    |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.081                    | -0.163          | -0.244          | 0.160           | -0.274          | -0.435          | 0.117           | -0.332          | -0.449          |                 | -0.175          |                 | -0.218          | -0.053          | 0.165           | -0.580          | 0.085           | 0.666           | -0.585          | 0.123           |                 | 0.0500 |
| 0.0640                    |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.092                    | -0.176          | -0.268          | 0.122           | -0.245          | -0.367          | 0.047           | -0.167          | -0.213          | -0.155          |                 |                 | -0.237          | -0.021          | 0.216           | -0.576          | 0.061           | 0.638           | -0.591          | 0.104           |                 | 0.0750 |
| 0.0810                    |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.084                    | -0.182          | -0.266          | 0.080           | -0.228          | -0.308          | 0.001           | -0.123          | -0.124          | -0.180          | -0.015          | 0.165           | -0.250          | 0.005           | 0.255           | -0.513          | 0.046           | 0.559           | -0.593          | 0.076           | 0.669           | 0.1000 |
| 0.1500                    | 0.058                    | -0.183          | -0.240          | -0.006          | -0.147          | -0.141          | -0.092          | -0.083          | 0.009           | -0.188          | -0.011          | 0.177           | -0.266          | 0.013           | 0.279           | -0.400          | 0.038           | 0.438           | -0.594          | 0.059           | 0.652           | 0.1500 |
| 0.2000                    | -0.001                   | -0.151          | -0.151          | -0.076          | -0.071          | 0.005           | -0.127          | -0.042          | 0.085           | -0.219          |                 |                 | -0.270          | 0.014           | 0.285           | -0.280          | 0.038           | 0.318           | -0.596          | 0.035           | 0.631           | 0.2000 |
| 0.3000                    | -0.117                   | -0.061          | 0.056           | -0.171          | -0.032          | 0.139           | -0.190          | -0.026          | 0.163           |                 |                 |                 | -0.268          | -0.004          | 0.264           | -0.217          | 0.009           | 0.226           | -0.602          | 0.009           | 0.611           | 0.3000 |
| 0.4000                    | -0.192                   | -0.025          | 0.166           | -0.198          | -0.016          | 0.182           | -0.206          | -0.022          | 0.164           |                 |                 |                 | -0.232          | -0.017          | 0.215           | -0.217          | -0.009          | 0.210           | -0.612          | -0.008          | 0.604           | 0.4000 |
| 0.5000                    | -0.184                   | -0.022          | 0.162           | -0.168          | -0.029          | 0.139           | -0.187          | -0.033          | 0.154           |                 |                 |                 | -0.224          | -0.020          | 0.204           | -0.178          | -0.009          | 0.170           | -0.595          | -0.015          | 0.580           | 0.5000 |
| 0.6000                    |                          | -0.034          |                 | -0.199          | -0.031          | 0.168           | -0.202          | -0.030          | 0.172           |                 |                 |                 | -0.203          | -0.022          | 0.181           | -0.210          | -0.032          | 0.178           | -0.541          | -0.023          | 0.518           | 0.6000 |
| 0.7000                    | -0.171                   |                 |                 | -0.176          | -0.020          | 0.156           | -0.171          | -0.024          | 0.147           |                 |                 |                 | -0.182          | -0.029          | 0.153           | -0.218          | -0.040          | 0.178           | -0.454          | -0.028          | 0.426           | 0.7000 |
| 0.8000                    | -0.156                   | -0.041          | 0.115           | -0.151          | -0.037          | 0.114           | -0.171          | -0.040          | 0.131           |                 |                 |                 | -0.231          | -0.049          | 0.182           | -0.238          | -0.050          | 0.187           | -0.292          | -0.036          | 0.256           | 0.8000 |
| 0.9000                    | -0.204                   | -0.051          | 0.153           | -0.207          | -0.043          | 0.165           | -0.233          | -0.052          | 0.181           |                 |                 |                 | -0.267          | -0.051          | 0.216           | -0.212          | -0.052          | 0.160           | -0.188          | -0.028          | 0.160           | 0.9000 |
| 1.0000                    | -0.317                   | -0.067          | 0.250           | -0.345          | -0.038          | 0.306           | -0.354          | -0.058          | 0.296           |                 |                 |                 | -0.289          | -0.034          | 0.254           | -0.141          | -0.046          | 0.095           | -0.141          | -0.002          | 0.139           | 1.0000 |
| M = 1.099      α = 03.93  |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.325                    | -0.532          | -0.858          | 0.292           | -0.805          | -1.097          | 0.308           | -0.504          | -0.812          |                 |                 |                 | -0.063          | 0.042           | 0.105           | -0.521          | 0.233           | 0.754           | -0.556          | 0.167           |                 | 0.0000 |
| 0.0125                    | 0.254                    | -0.275          | -0.529          | 0.322           | -0.654          | -0.976          | 0.331           | -0.588          | -0.919          | 0.051           | -0.147          | -0.198          | -0.070          | 0.048           | 0.118           | -0.522          | 0.203           | 0.725           | -0.551          |                 |                 | 0.0125 |
| 0.0250                    | 0.212                    | -0.120          | -0.332          | 0.335           | -0.506          | -0.841          | 0.330           | -0.595          | -0.925          | 0.065           | -0.113          | -0.178          | -0.078          | 0.056           | 0.134           |                 | 0.177           |                 | -0.549          |                 |                 | 0.0250 |
| 0.0420                    |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.212                    | -0.121          | -0.332          | 0.312           | -0.218          | -0.530          | 0.257           | -0.372          | -0.629          |                 | -0.082          |                 | -0.098          | 0.074           | 0.172           | -0.527          | 0.136           | 0.663           | -0.550          | 0.111           |                 | 0.0500 |
| 0.0640                    |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.235                    | -0.109          | -0.343          | 0.265           | -0.142          | -0.406          | 0.182           | -0.023          | -0.205          | -0.009          |                 |                 | -0.118          | 0.092           | 0.210           | -0.533          | 0.109           | 0.641           | -0.552          | 0.099           |                 | 0.0750 |
| 0.0810                    |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.228                    | -0.104          | -0.332          | 0.218           | -0.094          | -0.312          | 0.112           | 0.052           | -0.060          | -0.048          | 0.068           | 0.116           | -0.132          | 0.099           | 0.231           | -0.496          | 0.087           | 0.583           | -0.552          | 0.089           | 0.641           | 0.1000 |
| 0.1500                    | 0.195                    | -0.058          | -0.252          | 0.119           | 0.027           | -0.093          | 0.041           | 0.060           | 0.019           | -0.085          | 0.097           | 0.182           | -0.146          | 0.100           | 0.246           | -0.424          | 0.059           | 0.483           | -0.548          | 0.074           | 0.622           | 0.1500 |
| 0.2000                    | 0.116                    | 0.018           | -0.097          | 0.044           | 0.055           | 0.012           | -0.010          | 0.059           | 0.069           | -0.115          |                 |                 | -0.157          | 0.089           | 0.246           | -0.339          | 0.043           | 0.382           | -0.543          | 0.056           | 0.599           | 0.2000 |
| 0.3000                    | -0.009                   | 0.065           | 0.074           | -0.071          | 0.078           | 0.149           | -0.092          | 0.079           | 0.171           |                 |                 |                 | -0.178          | 0.058           | 0.236           | -0.232          | 0.012           | 0.244           | -0.542          | 0.033           | 0.574           | 0.3000 |
| 0.4000                    | -0.106                   | 0.064           | 0.170           | -0.124          | 0.057           | 0.181           | -0.143          | 0.045           | 0.187           |                 |                 |                 | -0.195          | 0.024           | 0.218           | -0.222          | -0.013          | 0.209           | -0.548          | 0.014           | 0.562           | 0.4000 |
| 0.5000                    | -0.156                   | 0.037           | 0.193           | -0.153          | 0.023           | 0.176           | -0.168          | 0.025           | 0.192           |                 |                 |                 | -0.213          | 0.008           | 0.205           | -0.171          | -0.024          | 0.146           | -0.536          | 0.001           | 0.537           | 0.5000 |
| 0.6000                    |                          |                 |                 | -0.187          | -0.009          | 0.177           | -0.195          | -0.014          | 0.180           |                 |                 |                 | -0.213          | -0.032          | 0.181           | -0.177          | -0.041          | 0.135           | -0.508          | -0.008          | 0.500           | 0.6000 |
| 0.7000                    | -0.195                   |                 |                 | -0.201          | -0.036          | 0.165           | -0.202          | -0.035          | 0.167           |                 |                 |                 | -0.183          | 0.054           | 0.129           | -0.153          | -0.042          | 0.111           | -0.461          | -0.013          | 0.448           | 0.7000 |
| 0.8000                    | -0.179                   | -0.066          | 0.113           | -0.169          | -0.063          | 0.106           | -0.185          | -0.055          | 0.130           |                 |                 |                 | -0.223          | -0.070          | 0.153           | -0.157          | -0.049          | 0.108           | -0.352          | -0.019          | 0.332           | 0.8000 |
| 0.9000                    | -0.177                   | -0.076          | 0.101           | -0.184          | -0.068          | 0.115           | -0.203          | -0.068          | 0.135           |                 |                 |                 | -0.240          | -0.065          | 0.175           | -0.142          | -0.052          | 0.091           | -0.214          | -0.002          | 0.213           | 0.9000 |
| 1.0000                    | -0.189                   | -0.072          | 0.117           | -0.245          | -0.054          | 0.192           | -0.255          | -0.073          | 0.181           |                 |                 |                 | -0.235          | -0.039          | 0.196           | -0.107          | -0.050          | 0.057           | -0.049          | 0.040           | 0.089           | 1.0000 |
| M = 1.300      α = -04.08 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.361                    | -0.207          | -0.568          | 0.274           | -0.275          | -0.549          | 0.213           | -0.382          | -0.596          |                 |                 |                 | 0.255           | -0.416          | -0.671          | 0.239           | -0.417          | -0.656          | 0.244           | -0.471          |                 | 0.0000 |
| 0.0125                    | 0.253                    | -0.224          | -0.477          | 0.219           | -0.327          | -0.546          | 0.208           | -0.379          | -0.587          | 0.209           | -0.396          | -0.606          | 0.203           | -0.403          | -0.606          | 0.204           | -0.418          | -0.622          | 0.199           |                 |                 | 0.0125 |
| 0.0250                    | 0.179                    | -0.215          | -0.394          | 0.179           | -0.332          | -0.511          | 0.192           | -0.375          | -0.567          | 0.185           | -0.392          | -0.577          | 0.163           | -0.394          | -0.557          |                 | -0.418          |                 | 0.167           |                 |                 | 0.0250 |
| 0.0420                    |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.131                    | -0.123          | -0.254          | 0.142           | -0.199          | -0.341          | 0.124           | -0.368          | -0.493          |                 | -0.380          |                 | 0.116           | -0.391          | -0.507          | 0.134           | -0.416          | -0.550          | 0.148           |                 |                 | 0.0500 |
| 0.0640                    |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.121                    | -0.133          | -0.254          | 0.112           | -0.157          | -0.269          | 0.115           | -0.211          | -0.326          | 0.007           |                 |                 | 0.101           | -0.320          | -0.421          | 0.117           | -0.421          | -0.537          | 0.115           |                 |                 | 0.0750 |
| 0.0810                    |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.100                    | -0.120          | -0.221          | 0.087           | -0.152          | -0.239          | 0.094           | -0.162          | -0.256          | 0.090           | -0.159          | -0.249          | 0.088           | -0.204          | -0.293          | 0.090           | -0.422          | -0.512          | 0.098           | -0.472          | -0.570          | 0.1000 |
| 0.1500                    | 0.081                    | -0.122          | -0.203          | 0.062           | -0.120          | -0.181          | 0.074           | -0.146          | -0.220          | 0.064           | -0.165          | -0.229          | 0.075           | -0.125          | -0.200          | 0.067           | -0.337          | -0.403          | 0.085           | -0.478          | -0.563          | 0.1500 |
| 0.2000                    | 0.052                    | -0.107          | -0.159          | 0.072           | -0.102          | -0.174          | 0.056           | -0.105          | -0.161          | 0.060           |                 |                 | 0.060           | -0.146          | -0.206          | 0.058           | -0.289          | -0.347          | 0.075           | -0.480          | -0.555          | 0.2000 |
| 0.3000                    | 0.052                    | -0.101          | -0.153          | 0.046           | -0.089          | -0.134          | 0.047           | -0.119          | -0.166          |                 |                 |                 | 0.045           | -0.134          | -0.179          | 0.039           | -0.222          | -0.260          | 0.070           | -0.454          | -0.524          | 0.3000 |
| 0.4000                    | 0.040                    | -0.111          | -0.151          | 0.035           | -0.111          | -0.147          | 0.039           | -0.121          | -0.160          |                 |                 |                 | 0.026           | -0.139          | -0.165          | 0.037           | -0.203          | -0.240          | 0.070           | -0.427          | -0.497          | 0.4000 |
| 0.5000                    | 0.014                    | -0.110          | -0.124          | 0.015           | -0.126          | -0.142          | 0.020           | -0.129          | -0.149          |                 |                 |                 | 0.020           | -0.136          | -0.156          | 0.063           | -0.184          | -0.247          | 0.055           | -0.395          | -0.450          | 0.5000 |
| 0.6000                    |                          | -0.120          |                 | 0.009           | -0.125          | -0.134          | 0.012           | -0.137          | -0.149          |                 |                 |                 | 0.016           | -0.150          | -0.165          | 0.049           | -0.186          | -0.235          | 0.035           | -0.356          | -0.391          | 0.6000 |
| 0.7000                    | 0.009                    |                 |                 | 0.003           | -0.135          | -0.137          | 0.008           | -0.132          | -0.140          |                 |                 |                 | 0.061           | -0.142          | -0.203          | 0.022           | -0.186          | -0.208          | 0.022           | -0.303          | -0.325          | 0.7000 |
| 0.8000                    | -0.015                   | -0.149          | -0.133          | 0.013           | -0.149          | -0.162          | 0.023           | -0.145          | -0.168          |                 |                 |                 | 0.036           | -0.143          | -0.179          | -0.015          | -0.189          | -0.174          | 0.010           | -0.254          | -0.264          | 0.8000 |
| 0.9000                    | 0.020                    | -0.121          | -0.141          | 0.021           | -0.127          | -0.148          | 0.016           | -0.138          | -0.154          |                 |                 |                 | -0.013          | -0.142          | -0.130          | -0.023          | -0.179</        |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.303      α = -0.10 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.351           | -0.178          | -0.529          | 0.311           | -0.247          | -0.557          | 0.215           | -0.421          | -0.637          |                 |                 |                 | -0.005          | -0.082          | -0.077          | 0.008           | -0.020          | -0.028          | -0.073          | -0.078          |                 | 0.0000 |
| 0.0125                   | 0.245           | -0.164          | -0.409          | 0.240           | -0.312          | -0.552          | 0.218           | -0.404          | -0.622          | 0.120           | -0.303          | -0.423          | 0.019           | -0.112          | -0.131          | -0.003          | -0.025          | -0.022          | -0.062          |                 |                 | 0.0125 |
| 0.0250                   | 0.170           | -0.146          | -0.317          | 0.188           | -0.327          | -0.515          | 0.205           | -0.385          | -0.590          | 0.084           | -0.269          | -0.353          | 0.028           | -0.119          | -0.147          |                 | -0.032          |                 | -0.059          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | 0.115           | -0.101          | -0.216          | 0.137           | -0.204          | -0.341          | 0.133           | -0.342          | -0.474          |                 | -0.237          |                 | 0.001           | -0.064          | -0.065          | -0.034          | -0.050          | -0.016          | -0.081          | -0.088          |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | 0.105           | -0.114          | -0.219          | 0.095           | -0.157          | -0.251          | 0.087           | -0.241          | -0.328          | 0.007           |                 |                 | -0.013          | -0.043          | -0.030          | -0.052          | -0.064          | -0.012          | -0.083          | -0.091          |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | 0.093           | -0.110          | -0.203          | 0.069           | -0.145          | -0.213          | 0.038           | -0.151          | -0.189          | 0.003           | -0.065          | -0.068          | -0.022          | -0.049          | -0.027          | -0.059          | -0.067          | -0.009          | -0.089          | -0.092          | -0.002          | 0.1000 |
| 0.1500                   | 0.063           | -0.109          | -0.171          | 0.028           | -0.086          | -0.114          | 0.022           | -0.085          | -0.107          | -0.004          | -0.089          | -0.085          | -0.024          | -0.045          | -0.021          | -0.064          | -0.075          | -0.011          | -0.091          | -0.090          | 0.001           | 0.1500 |
| 0.2000                   | 0.030           | -0.091          | -0.091          | -0.049          | -0.032          | -0.052          | -0.004          | -0.063          | -0.059          | -0.011          |                 |                 | -0.020          | -0.058          | -0.038          | -0.071          | -0.075          | -0.005          | -0.093          | -0.096          | -0.003          | 0.2000 |
| 0.3000                   | -0.000          | -0.049          | -0.049          | -0.017          | -0.036          | -0.019          | -0.014          | -0.057          | -0.042          |                 |                 |                 | -0.034          | -0.057          | -0.023          | -0.070          | -0.077          | -0.007          | -0.090          | -0.101          | -0.011          | 0.3000 |
| 0.4000                   | -0.021          | -0.041          | -0.021          | -0.030          | -0.059          | -0.029          | -0.030          | -0.061          | -0.031          |                 |                 |                 | -0.044          | -0.069          | -0.025          | -0.056          | -0.086          | -0.030          | -0.087          | -0.107          | -0.020          | 0.4000 |
| 0.5000                   | -0.040          | -0.050          | -0.010          | -0.044          | -0.063          | -0.019          | -0.046          | -0.079          | -0.033          |                 |                 |                 | -0.057          | -0.066          | -0.009          | -0.034          | -0.080          | -0.046          | -0.080          | -0.108          | -0.028          | 0.5000 |
| 0.6000                   |                 | -0.060          |                 | -0.056          | -0.058          | -0.002          | -0.054          | -0.077          | -0.024          |                 |                 |                 | -0.060          | -0.080          | -0.020          | -0.007          | -0.084          | -0.077          | -0.065          | -0.106          | -0.041          | 0.6000 |
| 0.7000                   | -0.053          |                 |                 | -0.063          | -0.068          | -0.005          | -0.060          | -0.073          | -0.013          |                 |                 |                 | -0.031          | -0.079          | -0.048          | -0.036          | -0.091          | -0.055          | -0.063          | -0.105          | -0.041          | 0.7000 |
| 0.8000                   | -0.085          | -0.083          | 0.001           | -0.056          | -0.084          | -0.028          | -0.055          | -0.094          | -0.039          |                 |                 |                 | -0.071          | -0.081          | -0.010          | -0.054          | -0.091          | -0.037          | -0.066          | -0.103          | -0.037          | 0.8000 |
| 0.9000                   | -0.060          | -0.072          | -0.013          | -0.060          | -0.072          | -0.013          | -0.072          | -0.082          | -0.010          |                 |                 |                 | -0.108          | -0.086          | 0.022           | -0.071          | -0.093          | -0.021          | -0.068          | -0.098          | -0.030          | 0.9000 |
| 1.0000                   | 0.022           | -0.047          | -0.069          | -0.074          | -0.034          | 0.040           | -0.110          | -0.038          | 0.073           |                 |                 |                 | -0.140          | -0.092          | 0.047           | -0.088          | -0.095          | -0.007          | -0.070          | -0.090          | -0.020          | 1.0000 |
| M = 1.304      α = 0.78  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.302           | -0.208          | -0.510          | 0.242           | -0.575          | -0.817          | 0.198           | -0.416          | -0.614          |                 |                 |                 | -0.043          | -0.073          | -0.030          | -0.385          | 0.236           | 0.620           | -0.427          | 0.171           |                 | 0.0000 |
| 0.0125                   | 0.211           | -0.145          | -0.355          | 0.208           | -0.436          | -0.644          | 0.211           | -0.537          | -0.748          | -0.127          | -0.277          | -0.149          | -0.070          | -0.017          | 0.053           | -0.387          | 0.200           | 0.587           | -0.420          |                 |                 | 0.0125 |
| 0.0250                   | 0.149           | -0.102          | -0.250          | 0.183           | -0.324          | -0.506          | 0.206           | -0.551          | -0.757          | -0.099          | -0.238          | -0.139          | -0.092          | 0.017           | 0.109           |                 | 0.170           |                 | -0.417          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | 0.111           | -0.078          | -0.189          | 0.157           | -0.182          | -0.339          | 0.147           | -0.258          | -0.405          |                 | -0.121          |                 | -0.118          | 0.024           | 0.142           | -0.387          | 0.123           | 0.510           | -0.426          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | 0.116           | -0.086          | -0.202          | 0.119           | -0.166          | -0.285          | 0.117           | -0.172          | -0.289          | -0.070          |                 |                 | -0.138          | 0.037           | 0.175           | -0.384          | 0.099           | 0.483           | -0.427          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | 0.082           | -0.113          | -0.195          | 0.091           | -0.152          | -0.243          | 0.071           | -0.088          | -0.159          | -0.092          | 0.017           | 0.109           | -0.146          | 0.053           | 0.199           | -0.324          | 0.086           | 0.410           | -0.428          | 0.103           | 0.532           | 0.1000 |
| 0.1500                   | 0.072           | -0.118          | -0.190          | 0.045           | -0.125          | -0.170          | 0.016           | -0.046          | -0.062          | -0.099          | 0.020           | 0.119           | -0.149          | 0.057           | 0.207           | -0.238          | 0.058           | 0.296           | -0.428          | 0.080           | 0.508           | 0.1500 |
| 0.2000                   | 0.043           | -0.111          | -0.154          | 0.006           | -0.040          | -0.045          | -0.029          | -0.007          | 0.022           | -0.103          |                 |                 | -0.155          | 0.050           | 0.205           | -0.202          | 0.052           | 0.253           | -0.426          | 0.064           | 0.491           | 0.2000 |
| 0.3000                   | -0.030          | -0.003          | 0.026           | -0.064          | 0.019           | 0.083           | -0.081          | 0.016           | 0.097           |                 |                 |                 | -0.157          | 0.039           | 0.196           | -0.173          | 0.024           | 0.196           | -0.380          | 0.041           | 0.422           | 0.3000 |
| 0.4000                   | -0.079          | 0.017           | 0.096           | -0.092          | 0.019           | 0.111           | -0.092          | 0.023           | 0.115           |                 |                 |                 | -0.153          | 0.012           | 0.165           | -0.153          | 0.010           | 0.163           | -0.366          | 0.032           | 0.398           | 0.4000 |
| 0.5000                   | -0.099          | 0.011           | 0.110           | -0.103          | 0.006           | 0.110           | -0.111          | 0.000           | 0.112           |                 |                 |                 | -0.147          | 0.010           | 0.156           | -0.121          | 0.021           | 0.141           | -0.340          | 0.022           | 0.363           | 0.5000 |
| 0.6000                   |                 | 0.004           |                 | -0.106          | 0.010           | 0.116           | -0.112          | 0.002           | 0.113           |                 |                 |                 | -0.149          | 0.004           | 0.153           | -0.107          | 0.001           | 0.106           | -0.299          | 0.015           | 0.313           | 0.6000 |
| 0.7000                   | -0.111          |                 |                 | -0.122          | 0.005           | 0.126           | -0.125          | 0.013           | 0.138           |                 |                 |                 | -0.080          | 0.007           | 0.073           | -0.119          | 0.002           | 0.120           | -0.242          | 0.008           | 0.250           | 0.7000 |
| 0.8000                   | -0.146          | -0.005          | 0.141           | -0.127          | -0.004          | 0.122           | -0.096          | 0.000           | 0.097           |                 |                 |                 | -0.146          | 0.002           | 0.148           | -0.141          | -0.004          | 0.137           | -0.203          | 0.008           | 0.211           | 0.8000 |
| 0.9000                   | -0.099          | -0.005          | 0.094           | -0.105          |                 | 0.105           | -0.134          | -0.010          | 0.123           |                 |                 |                 | -0.185          | -0.018          | 0.167           | -0.133          | -0.017          | 0.116           | -0.174          | 0.019           | 0.193           | 0.9000 |
| 1.0000                   | 0.032           | -0.001          | -0.033          | -0.058          | 0.018           | 0.075           | -0.237          | -0.019          | 0.218           |                 |                 |                 | -0.199          | -0.068          | 0.130           | -0.094          | -0.036          | 0.058           | -0.156          | 0.041           | 0.198           | 1.0000 |
| M = 1.303      α = 0.781 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.121           | 0.052           | -0.069          | -0.017          | 0.018           | 0.035           | -0.147          | 0.070           | 0.217           |                 |                 |                 | -0.342          | 0.236           | 0.578           | -0.408          | 0.242           | 0.650           | -0.440          | 0.237           |                 | 0.0000 |
| 0.0125                   | 0.051           | 0.054           | 0.003           | -0.036          | 0.028           | 0.064           | -0.109          | 0.079           | 0.188           | -0.322          | 0.176           | 0.498           | -0.349          | 0.228           | 0.577           | -0.407          | 0.252           | 0.659           | -0.442          |                 |                 | 0.0125 |
| 0.0250                   | 0.001           | 0.053           | 0.052           | -0.050          | 0.034           | 0.085           | -0.089          | 0.086           | 0.174           | -0.288          | 0.176           | 0.465           | -0.361          | 0.218           | 0.579           |                 | 0.255           |                 | -0.443          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.041          | 0.038           | 0.079           | -0.066          | 0.038           | 0.104           | -0.103          | 0.092           | 0.195           |                 | 0.162           |                 | -0.395          | 0.195           | 0.590           | -0.411          | 0.243           | 0.654           | -0.443          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.022          | 0.026           | 0.048           | -0.094          | 0.049           | 0.143           | -0.111          | 0.100           | 0.211           | -0.058          |                 |                 | -0.344          | 0.196           | 0.540           | -0.417          | 0.226           | 0.643           | -0.444          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.027          | 0.025           | 0.052           | -0.084          | 0.052           | 0.136           | -0.133          | 0.107           | 0.240           | -0.154          | 0.137           | 0.291           | -0.220          | 0.189           | 0.409           | -0.421          | 0.210           | 0.631           | -0.444          | 0.225           | 0.669           | 0.1000 |
| 0.1500                   | -0.099          | 0.037           | 0.135           | -0.124          | 0.073           | 0.197           | -0.151          | 0.108           | 0.259           | -0.163          | 0.141           | 0.303           | -0.173          | 0.145           | 0.318           | -0.425          | 0.183           | 0.608           | -0.444          | 0.208           | 0.652           | 0.1500 |
| 0.2000                   | -0.101          | 0.049           | 0.150           | -0.129          | 0.102           | 0.231           | -0.161          | 0.124           | 0.285           | -0.179          |                 |                 | -0.161          | 0.132           | 0.293           | -0.443          | 0.167           | 0.610           | -0.447          | 0.194           | 0.641           | 0.2000 |
| 0.3000                   | -0.151          | 0.081           | 0.232           | -0.165          | 0.104           | 0.269           | -0.180          | 0.105           | 0.285           |                 |                 |                 | -0.191          | 0.115           | 0.305           | -0.469          | 0.141           | 0.610           | -0.451          | 0.173           | 0.624           | 0.3000 |
| 0.4000                   | -0.153          | 0.081           | 0.234           | -0.181          | 0.090           | 0.272           | -0.184          | 0.100           | 0.284           |                 |                 |                 | -0.184          | 0.116           | 0.300           | -0.488          | 0.126           | 0.614           | -0.476          | 0.160           | 0.636           | 0.4000 |
| 0.5000                   | -0.174          | 0.083           | 0.257           | -0.178          | 0.085           | 0.262           | -0.186          | 0.093           | 0.279           |                 |                 |                 | -0.201          | 0.096           | 0.297           | -0.465          | 0.113           | 0.578           | -0.486          | 0.155           | 0.642           | 0.5000 |
| 0.6000                   |                 | 0.080           |                 | -0.190          | 0.080           | 0.271           | -0.202          | 0.088           | 0.291           |                 |                 |                 | -0.197          | 0.092           | 0.289           | -0.362          | 0.103           | 0.465           | -0.501          | 0.143           | 0.644           | 0.6000 |
| 0.7000                   | -0.171          |                 |                 | -0.199          | 0.079           | 0.277           | -0.209          | 0.083           | 0.292           |                 |                 |                 | -0.114          | 0.092           | 0.206           | -0.249          | 0.100           | 0.349           | -0.512          | 0.143           | 0.644           | 0.7000 |
| 0.8000                   | -0.195          | 0.069           | 0.264           | -0.209          | 0.076           | 0.285           | -0.199          | 0.078           | 0.274           |                 |                 |                 | -0.126          | 0.074           | 0.200           | -0.236          | 0.102           | 0.338           | -0.521          | 0.133           | 0.644           | 0.8000 |
| 0.9000                   | -0.159          | 0.081           | 0.240           | -0.138          | 0.091           | 0.229           | -0.139          | 0.089           | 0.228           |                 |                 |                 | -0.159          | 0.096           | 0.255           | -0.206          | 0.091           |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $0^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

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| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |        |        |        |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|--------|--------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |        |        |        |
| M = 1.300      α = 11.89 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        |        |        |
| 0.0000                   | -0.196          | 0.225           | 0.421           | -0.298          | 0.209           | 0.507           | -0.438          | 0.200           | 0.638           | -0.438          | 0.200           | 0.638           | -0.485          | 0.234           | 0.719           | -0.485          | 0.234           | 0.731           | -0.510          | 0.216           | 0.725           | -0.519 | 0.242  | 0.0000 |        |
| 0.0125                   | -0.136          | 0.211           | 0.345           | -0.364          | 0.209           | 0.574           | -0.457          | 0.215           | 0.672           | -0.457          | 0.215           | 0.672           | -0.492          | 0.265           | 0.757           | -0.492          | 0.265           | 0.757           | -0.509          | 0.263           | 0.771           | -0.527 | 0.304  | 0.0125 |        |
| 0.0250                   | -0.099          | 0.198           | 0.297           | -0.365          | 0.206           | 0.571           | -0.479          | 0.223           | 0.702           | -0.479          | 0.223           | 0.702           | -0.490          | 0.251           | 0.741           | -0.490          | 0.251           | 0.741           | -0.509          | 0.293           | 0.771           | -0.531 | 0.304  | 0.0250 |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        | 0.0420 |        |
| 0.0500                   | -0.105          | 0.177           | 0.281           | -0.170          | 0.187           | 0.358           | -0.528          | 0.218           | 0.745           | -0.528          | 0.218           | 0.745           | -0.540          | 0.250           | 0.774           | -0.540          | 0.250           | 0.774           | -0.509          | 0.305           | 0.814           | -0.530 | 0.304  | 0.0500 |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        | 0.0640 |        |
| 0.0750                   | -0.120          | 0.164           | 0.284           | -0.186          | 0.181           | 0.367           | -0.217          | 0.209           | 0.426           | -0.547          |                 |                 | -0.550          | 0.268           | 0.818           | -0.550          | 0.268           | 0.818           | -0.512          | 0.299           | 0.811           | -0.527 | 0.315  | 0.0750 |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        | 0.0810 |        |
| 0.1000                   | -0.147          | 0.159           | 0.307           | -0.188          | 0.173           | 0.361           | -0.208          | 0.204           | 0.412           | -0.546          | 0.241           | 0.787           | -0.540          | 0.260           | 0.801           | -0.540          | 0.260           | 0.801           | -0.516          | 0.293           | 0.809           | -0.527 | 0.308  | 0.1000 |        |
| 0.1500                   | -0.176          | 0.155           | 0.331           | -0.196          | 0.174           | 0.370           | -0.219          | 0.211           | 0.430           | -0.264          | 0.224           | 0.488           | -0.564          | 0.245           | 0.809           | -0.564          | 0.245           | 0.809           | -0.520          | 0.280           | 0.801           | -0.530 | 0.299  | 0.1500 |        |
| 0.2000                   | -0.183          | 0.159           | 0.351           | -0.201          | 0.200           | 0.401           | -0.215          | 0.216           | 0.432           | -0.236          |                 |                 | -0.564          | 0.230           | 0.686           | -0.564          | 0.230           | 0.686           | -0.538          | 0.270           | 0.808           | -0.550 | 0.289  | 0.2000 |        |
| 0.3000                   | -0.198          | 0.183           | 0.381           | -0.205          | 0.191           | 0.396           | -0.227          | 0.199           | 0.427           |                 |                 |                 | -0.264          | 0.221           | 0.485           | -0.264          | 0.221           | 0.485           | -0.557          | 0.243           | 0.799           | -0.554 | 0.265  | 0.3000 |        |
| 0.4000                   | -0.217          | 0.173           | 0.390           | -0.233          | 0.180           | 0.413           | -0.240          | 0.187           | 0.427           |                 |                 |                 | -0.263          | 0.204           | 0.467           | -0.263          | 0.204           | 0.467           | -0.571          | 0.242           | 0.813           | -0.587 | 0.250  | 0.4000 |        |
| 0.5000                   | -0.239          | 0.174           | 0.413           | -0.244          | 0.182           | 0.426           | -0.255          | 0.183           | 0.438           |                 |                 |                 | -0.264          | 0.194           | 0.457           | -0.264          | 0.194           | 0.457           | -0.618          | 0.240           | 0.857           | -0.602 | 0.233  | 0.5000 |        |
| 0.6000                   |                 | 0.180           |                 | -0.246          | 0.179           | 0.425           | -0.259          | 0.181           | 0.439           |                 |                 |                 | -0.260          | 0.201           | 0.461           | -0.260          | 0.201           | 0.461           | -0.632          | 0.210           | 0.842           | -0.617 | 0.220  | 0.6000 |        |
| 0.7000                   | -0.237          |                 |                 | -0.255          | 0.206           | 0.460           | -0.261          | 0.210           | 0.471           |                 |                 |                 | -0.075          | 0.202           | 0.277           | -0.075          | 0.202           | 0.277           | -0.603          | 0.180           | 0.784           | -0.632 | 0.211  | 0.7000 |        |
| 0.8000                   | -0.258          | 0.165           | 0.423           | -0.257          | 0.168           | 0.426           | -0.181          | 0.164           | 0.345           |                 |                 |                 | -0.126          | 0.158           | 0.284           | -0.126          | 0.158           | 0.284           | -0.580          | 0.162           | 0.742           | -0.633 | 0.197  | 0.8000 |        |
| 0.9000                   | -0.154          | 0.145           | 0.300           | -0.140          | 0.151           | 0.290           | -0.163          | 0.145           | 0.308           |                 |                 |                 | -0.214          | 0.153           | 0.367           | -0.214          | 0.153           | 0.367           | -0.538          | 0.157           | 0.695           | -0.556 | 0.194  | 0.9000 |        |
| 1.0000                   | 0.074           | 0.118           | 0.044           | 0.098           | 0.153           | 0.055           | -0.207          | 0.153           | 0.360           |                 |                 |                 | -0.338          | 0.187           | 0.525           | -0.338          | 0.187           | 0.525           | -0.479          | 0.165           | 0.644           | -0.401 | 0.202  | 1.0000 |        |
| M = 1.299      α = 15.72 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        |        |        |
| 0.0000                   | -0.558          | 0.302           | 0.860           | -0.498          | 0.276           | 0.774           | -0.545          | 0.246           | 0.791           | -0.545          | 0.246           | 0.791           | -0.577          | 0.234           | 0.811           | -0.577          | 0.234           | 0.811           | -0.558          | 0.168           | 0.726           | -0.454 | 0.302  | 0.0000 |        |
| 0.0125                   | -0.429          | 0.326           | 0.755           | -0.522          | 0.312           | 0.834           | -0.537          | 0.298           | 0.835           | -0.537          | 0.298           | 0.835           | -0.560          | 0.287           | 0.847           | -0.560          | 0.287           | 0.847           | -0.557          | 0.277           | 0.834           | -0.432 | 0.302  | 0.0125 |        |
| 0.0250                   | -0.328          | 0.337           | 0.665           | -0.540          | 0.332           | 0.872           | -0.547          | 0.330           | 0.877           | -0.566          | 0.342           | 0.908           | -0.577          | 0.354           | 0.931           | -0.577          | 0.354           | 0.931           | -0.557          | 0.345           |                 | -0.417 | 0.341  | 0.0250 |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        | 0.0420 |        |
| 0.0500                   | -0.209          | 0.322           | 0.531           | -0.557          | 0.325           | 0.882           | -0.616          | 0.338           | 0.954           | -0.563          | 0.363           | 0.978           | -0.577          | 0.373           | 0.949           | -0.577          | 0.373           | 0.949           | -0.558          | 0.360           | 0.918           | -0.410 | 0.341  | 0.0500 |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        | 0.0640 |        |
| 0.0750                   | -0.201          | 0.308           | 0.509           | -0.336          | 0.322           | 0.658           | -0.575          | 0.332           | 0.908           | -0.619          |                 |                 | -0.588          | 0.379           | 0.967           | -0.588          | 0.379           | 0.967           | -0.563          | 0.381           | 0.944           | -0.399 | 0.358  | 0.0750 |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        | 0.0810 |        |
| 0.1000                   | -0.210          | 0.302           | 0.512           | -0.236          | 0.311           | 0.547           | -0.567          | 0.336           | 0.903           | -0.612          | 0.357           | 0.969           | -0.608          | 0.384           | 0.993           | -0.608          | 0.384           | 0.993           | -0.568          | 0.386           | 0.953           | -0.392 | 0.370  | 0.1000 |        |
| 0.1500                   | -0.234          | 0.296           | 0.530           | -0.265          | 0.308           | 0.574           | -0.376          | 0.335           | 0.711           | -0.591          | 0.356           | 0.947           | -0.615          | 0.369           | 0.985           | -0.615          | 0.369           | 0.985           | -0.570          | 0.374           | 0.944           | -0.397 | 0.378  | 0.1500 |        |
| 0.2000                   | -0.256          | 0.292           | 0.548           | -0.259          | 0.323           | 0.582           | -0.298          | 0.347           | 0.645           | -0.500          |                 |                 | -0.613          | 0.348           | 0.961           | -0.613          | 0.348           | 0.961           | -0.590          | 0.367           | 0.957           | -0.402 | 0.384  | 0.2000 |        |
| 0.3000                   | -0.242          | 0.312           | 0.554           | -0.268          | 0.322           | 0.590           | -0.290          | 0.332           | 0.622           |                 |                 |                 | -0.502          | 0.331           | 0.833           | -0.502          | 0.331           | 0.833           | -0.630          | 0.351           | 0.981           | -0.430 | 0.381  | 0.3000 |        |
| 0.4000                   | -0.270          | 0.290           | 0.561           | -0.286          | 0.301           | 0.588           | -0.291          | 0.306           | 0.597           |                 |                 |                 | -0.397          | 0.319           | 0.716           | -0.397          | 0.319           | 0.716           | -0.596          | 0.338           | 0.934           | -0.488 | 0.366  | 0.4000 |        |
| 0.5000                   | -0.277          | 0.286           | 0.564           | -0.287          | 0.290           | 0.576           | -0.295          | 0.295           | 0.591           |                 |                 |                 | -0.353          | 0.308           | 0.660           | -0.353          | 0.308           | 0.660           | -0.550          | 0.335           | 0.885           | -0.516 | 0.370  | 0.5000 |        |
| 0.6000                   |                 | 0.280           |                 | -0.291          | 0.283           | 0.574           | -0.306          | 0.289           | 0.599           |                 |                 |                 | -0.345          | 0.303           | 0.647           | -0.345          | 0.303           | 0.647           | -0.545          | 0.322           | 0.867           | -0.540 | 0.369  | 0.6000 |        |
| 0.7000                   | -0.278          |                 |                 | -0.299          | 0.284           | 0.584           | -0.310          | 0.289           | 0.599           |                 |                 |                 | -0.150          | 0.299           | 0.448           | -0.150          | 0.299           | 0.448           | -0.547          | 0.310           | 0.857           | -0.543 | 0.364  | 0.7000 |        |
| 0.8000                   | -0.304          | 0.276           | 0.581           | -0.306          | 0.290           | 0.596           | -0.229          | 0.292           | 0.521           |                 |                 |                 | -0.077          | 0.292           | 0.369           | -0.077          | 0.292           | 0.369           | -0.550          | 0.295           | 0.845           | -0.545 | 0.356  | 0.8000 |        |
| 0.9000                   | -0.155          | 0.260           | 0.415           | -0.106          | 0.274           | 0.380           | -0.127          | 0.273           | 0.400           |                 |                 |                 | -0.145          | 0.277           | 0.422           | -0.145          | 0.277           | 0.422           | -0.549          | 0.295           | 0.844           | -0.545 | 0.351  | 0.9000 |        |
| 1.0000                   | 0.171           | 0.234           | 0.063           | 0.299           | 0.237           | -0.062          | -0.005          | 0.232           | 0.237           |                 |                 |                 | -0.354          | 0.253           | 0.606           | -0.354          | 0.253           | 0.606           | -0.544          | 0.309           | 0.853           | -0.545 | 0.348  | 0.893  | 1.0000 |
| M = 1.503      α = 03.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        |        |        |
| 0.0000                   | 0.213           | -0.123          | -0.336          | 0.203           | -0.240          | -0.443          | 0.170           | -0.356          | -0.525          | -0.036          | -0.007          | 0.029           | -0.036          | -0.007          | 0.029           | -0.336          | 0.215           | 0.550           | -0.432          | 0.163           |                 |        | 0.0000 |        |        |
| 0.0125                   | 0.160           | -0.096          | -0.256          | 0.186           | -0.292          | -0.478          | 0.172           | -0.463          | -0.636          | -0.064          | 0.024           | 0.088           | -0.064          | 0.024           | 0.088           | -0.327          | 0.184           | 0.511           | -0.435          |                 |                 |        | 0.0125 |        |        |
| 0.0250                   | 0.119           | -0.078          | -0.197          | 0.164           | -0.295          | -0.459          | 0.162           | -0.470          | -0.632          | -0.163          | -0.246          | -0.076          | -0.085          | 0.042           | 0.127           |                 | 0.157           |                 | -0.433          |                 |                 |        | 0.0250 |        |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        | 0.0420 |        |        |
| 0.0500                   | 0.072           | -0.069          | -0.140          | 0.107           | -0.152          | -0.259          | 0.103           | -0.182          | -0.284          | -0.034          |                 |                 | -0.106          | 0.044           | 0.149           | -0.313          | 0.118           | 0.431           | -0.412          | 0.143           |                 |        | 0.0500 |        |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        | 0.0640 |        |        |
| 0.0750                   | 0.070           | -0.077          | -0.146          | 0.076           | -0.150          | -0.226          | 0.085           | -0.116          | -0.201          | -0.118          |                 |                 | -0.119          | 0.055           | 0.175           | -0.312          | 0.103           | 0.415           | -0.407          | 0.131           |                 |        | 0.0750 |        |        |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        | 0.0810 |        |        |
| 0.1000                   | 0.058           | -0.076          | -0.133          | 0.055           | -0.140          | -0.195          | 0.042           | -0.066          | -0.108          | -0.109          | 0.031           | 0.140           | -0.125          | 0.063           | 0.188           | -0.304          | 0.094           | 0.398           | -0.407          | 0.107           | 0.515           | 0.1000 |        |        |        |
| 0.1500                   | 0.032           | -0.099          | -0.131          | 0.037           | -0.094          | -0.131          | 0.014           | -0.008          | -0.022          | -0.105          | 0.026           | 0.131           | -0.122          | 0.060           | 0.182           | -0.205          | 0.082           | 0.287           | -0.409          | 0.096           | 0.505           | 0.1500 |        |        |        |
| 0.2000                   | 0.027           | -0.102          | -0.129          | 0.007           | -0.057          | -0.064          | -0.030          | 0.017           | 0.046           | -0.076          |                 |                 | -0.135          | 0.052           | 0.187           | -0.172          | 0.064           | 0.236           | -0.404          | 0.077           | 0.482           | 0.2000 |        |        |        |
| 0.3000                   | -0.019          | -0.027          | -0.007          | -0.038          | 0.024           | 0.062           | -0.036          | 0.023           | 0.059           |                 |                 |                 | -0.146          | 0.051           | 0.197           | -0.154          | 0.033           | 0.187           | -0.396          | 0.062           | 0.458           | 0.3000 |        |        |        |
| 0.4000                   | -0.060          | 0.013           | 0.073           | -0.072          | 0.032           | 0.104           | -0.070          | 0.022           | 0.092           |                 |                 |                 | -0.139          | 0.031           | 0.170           | -0.144          | 0.031           | 0.175           | -0.245          | 0.036           | 0.282           | 0.4000 |        |        |        |
| 0.5000                   | -0.077          | 0.009           | 0.087           | -0.079          | 0.014           | 0.093           | -0.081          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        |        |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.703      α = 03.73  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.175           | -0.039          | -0.215          | 0.211           | -0.237          | -0.448          | 0.130           | -0.314          | -0.444          |                 |                 |                 | -0.042          | 0.070           | 0.112           | -0.295          | 0.233           | 0.528           | -0.320          | 0.052           |                 | 0.0000 |
| 0.0125                    | 0.132           | -0.035          | -0.167          | 0.172           | -0.187          | -0.359          | 0.145           | -0.352          | -0.497          | -0.143          | -0.174          | -0.031          | -0.065          | 0.059           | 0.124           | -0.279          | 0.183           | 0.462           | -0.322          |                 |                 | 0.0125 |
| 0.0250                    | 0.100           | -0.034          | -0.134          | 0.145           | -0.147          | -0.292          | 0.145           | -0.341          | -0.486          | -0.141          | -0.169          | -0.028          | -0.083          | 0.054           | 0.137           |                 | 0.149           |                 | -0.323          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.072           | -0.039          | -0.111          | 0.123           | -0.095          | -0.219          | 0.098           | -0.174          | -0.271          |                 | 0.026           |                 | -0.107          | 0.059           | 0.165           | -0.249          | 0.124           | 0.373           | -0.322          | 0.123           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.073           | -0.050          | -0.123          | 0.076           | -0.089          | -0.164          | 0.054           | -0.135          | -0.189          | -0.089          |                 |                 | -0.119          | 0.058           | 0.177           | -0.245          | 0.090           | 0.335           | -0.308          | 0.124           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.060           | -0.040          | -0.100          | 0.053           | -0.097          | -0.150          | 0.018           | -0.052          | -0.069          | -0.117          | 0.034           | 0.151           | -0.125          | 0.063           | 0.188           | -0.245          | 0.081           | 0.326           | -0.300          | 0.098           | 0.398           | 0.1000 |
| 0.1500                    | 0.044           | -0.057          | -0.102          | 0.018           | -0.090          | -0.108          | -0.010          | -0.013          | -0.003          | -0.104          | 0.024           | 0.128           | -0.126          | 0.056           | 0.182           | -0.238          | 0.060           | 0.298           | -0.293          | 0.076           | 0.369           | 0.1500 |
| 0.2000                    | 0.016           | -0.079          | -0.095          | -0.016          | -0.047          | -0.031          | -0.041          | 0.026           | 0.067           | -0.100          |                 |                 | -0.128          | 0.041           | 0.169           | -0.195          | 0.049           | 0.243           | -0.287          | 0.068           | 0.355           | 0.2000 |
| 0.3000                    | -0.037          | -0.050          | -0.013          | -0.065          | 0.018           | 0.083           | -0.072          | 0.012           | 0.084           |                 |                 |                 | -0.130          | 0.026           | 0.156           | -0.149          | 0.042           | 0.191           | -0.286          | 0.052           | 0.338           | 0.3000 |
| 0.4000                    | -0.057          | -0.004          | 0.053           | -0.067          | 0.018           | 0.085           | -0.080          | 0.008           | 0.088           |                 |                 |                 | -0.120          | 0.021           | 0.141           | -0.123          | 0.025           | 0.148           | -0.278          | 0.038           | 0.316           | 0.4000 |
| 0.5000                    | -0.077          | 0.016           | 0.093           | -0.077          | 0.023           | 0.100           | -0.079          | 0.013           | 0.093           |                 |                 |                 | -0.118          | 0.016           | 0.133           | -0.120          | 0.020           | 0.140           | -0.276          | 0.031           | 0.307           | 0.5000 |
| 0.6000                    |                 | 0.011           |                 | -0.084          | 0.011           | 0.095           | -0.084          | 0.011           | 0.095           |                 |                 |                 | -0.116          | 0.008           | 0.125           | -0.106          | 0.006           | 0.112           | -0.274          | 0.014           | 0.228           | 0.6000 |
| 0.7000                    | -0.066          |                 |                 | -0.082          | -0.001          | 0.080           | -0.091          | 0.004           | 0.094           |                 |                 |                 | -0.095          | 0.006           | 0.101           | -0.094          | 0.003           | 0.097           | -0.273          | 0.006           | 0.190           | 0.7000 |
| 0.8000                    | -0.104          | -0.012          | 0.092           | -0.098          | -0.009          | 0.088           | -0.101          | -0.006          | 0.095           |                 |                 |                 | -0.088          | -0.009          | 0.079           | -0.109          | -0.001          | 0.109           | -0.177          | 0.005           | 0.182           | 0.8000 |
| 0.9000                    | -0.109          | -0.012          | 0.096           | -0.101          | -0.012          | 0.089           | -0.088          | -0.010          | 0.077           |                 |                 |                 | -0.117          | -0.013          | 0.104           | -0.114          | -0.003          | 0.111           | -0.165          | 0.009           | 0.174           | 0.9000 |
| 1.0000                    | -0.081          | -0.006          | 0.075           | -0.092          | -0.010          | 0.082           | -0.050          | -0.008          | 0.042           |                 |                 |                 | -0.181          | -0.006          | 0.175           | -0.107          | -0.002          | 0.105           | -0.148          | 0.019           | 0.167           | 1.0000 |
| M = 1.909      α = 03.93  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.179           | 0.021           | -0.158          | 0.202           | -0.117          | -0.319          | 0.112           | -0.176          | -0.288          |                 |                 |                 | -0.085          | 0.144           | 0.229           | -0.193          | 0.264           | 0.457           | -0.173          | 0.138           |                 | 0.0000 |
| 0.0125                    | 0.130           | 0.015           | -0.116          | 0.162           | -0.098          | -0.259          | 0.113           | -0.213          | -0.327          | -0.107          | -0.095          | 0.011           | -0.083          | 0.136           | 0.219           | -0.180          | 0.212           | 0.392           | -0.193          |                 |                 | 0.0125 |
| 0.0250                    | 0.094           | 0.009           | -0.085          | 0.131           | -0.081          | -0.211          | 0.105           | -0.213          | -0.319          | -0.110          | -0.032          | 0.077           | -0.080          | 0.130           | 0.209           |                 | 0.179           |                 | -0.205          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.060           | 0.001           | -0.059          | 0.099           | -0.052          | -0.151          | 0.059           | -0.102          | -0.161          |                 | 0.092           |                 | -0.071          | 0.120           | 0.191           | -0.159          | 0.168           | 0.328           | -0.204          | 0.148           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.064           | -0.009          | -0.073          | 0.069           | -0.049          | -0.118          | 0.034           | -0.051          | -0.085          | -0.103          |                 |                 | -0.075          | 0.105           | 0.180           | -0.162          | 0.140           | 0.302           | -0.205          | 0.137           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.054           | -0.005          | -0.059          | 0.042           | -0.051          | -0.093          | 0.007           | -0.003          | -0.010          | -0.103          | 0.063           | 0.167           | -0.076          | 0.095           | 0.170           | -0.162          | 0.117           | 0.279           | -0.200          | 0.113           | 0.313           | 0.1000 |
| 0.1500                    | 0.041           | -0.017          | -0.057          | 0.014           | -0.037          | -0.050          | -0.011          | 0.029           | 0.040           | -0.092          | 0.048           | 0.139           | -0.070          | 0.086           | 0.156           | -0.169          | 0.094           | 0.263           | -0.197          | 0.104           | 0.301           | 0.1500 |
| 0.2000                    | 0.024           | -0.026          | -0.050          | 0.000           | -0.011          | -0.021          | 0.074           | 0.095           | -0.076          |                 |                 |                 | -0.068          | 0.073           | 0.141           | -0.162          | 0.075           | 0.237           | -0.199          | 0.087           | 0.287           | 0.2000 |
| 0.3000                    | -0.016          | -0.023          | -0.007          | -0.032          | 0.043           | 0.074           | -0.052          | 0.049           | 0.101           |                 |                 |                 | -0.078          | 0.056           | 0.134           | -0.153          | 0.048           | 0.201           | -0.193          | 0.063           | 0.256           | 0.3000 |
| 0.4000                    | -0.044          | 0.025           | 0.070           | -0.057          | 0.045           | 0.102           | -0.066          | 0.046           | 0.112           |                 |                 |                 | -0.090          | 0.036           | 0.126           | -0.117          | 0.036           | 0.152           | -0.183          | 0.053           | 0.236           | 0.4000 |
| 0.5000                    | -0.066          | 0.033           | 0.099           | -0.063          | 0.012           | 0.075           | -0.070          | 0.030           | 0.100           |                 |                 |                 | -0.094          | 0.025           | 0.120           | -0.105          | 0.029           | 0.134           | -0.193          | 0.040           | 0.223           | 0.5000 |
| 0.6000                    |                 | 0.018           |                 | -0.068          | 0.011           | 0.079           | -0.074          | 0.021           | 0.095           |                 |                 |                 | -0.093          | 0.015           | 0.108           | -0.092          | 0.019           | 0.110           | -0.197          | 0.026           | 0.224           | 0.6000 |
| 0.7000                    | -0.039          |                 |                 | -0.068          | 0.011           | 0.079           | -0.074          | 0.021           | 0.095           |                 |                 |                 | -0.072          | 0.017           | 0.089           | -0.082          | 0.016           | 0.098           | -0.196          | 0.020           | 0.217           | 0.7000 |
| 0.8000                    | -0.078          | -0.010          | 0.068           | -0.074          | -0.001          | 0.073           | -0.077          | 0.008           | 0.085           |                 |                 |                 | -0.041          | 0.006           | 0.047           | -0.089          | 0.011           | 0.100           | -0.188          | 0.016           | 0.204           | 0.8000 |
| 0.9000                    | -0.078          | -0.010          | 0.068           | -0.077          | -0.008          | 0.069           | -0.066          | -0.005          | 0.061           |                 |                 |                 | -0.078          | 0.007           | 0.045           | -0.093          | -0.005          | 0.088           | -0.170          | 0.021           | 0.191           | 0.9000 |
| 1.0000                    | -0.038          | -0.001          | 0.037           | -0.077          | -0.010          | 0.067           | -0.040          | -0.017          | 0.023           |                 |                 |                 | -0.184          | 0.019           | 0.203           | -0.094          | -0.032          | 0.062           | -0.141          | 0.036           | 0.177           | 1.0000 |
| M = 2.235      α = -03.93 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.287           | -0.068          | -0.355          | 0.253           | -0.077          | -0.330          | 0.232           | -0.060          | -0.292          |                 |                 |                 | 0.077           | -0.002          | -0.079          | 0.210           | -0.047          | -0.258          | 0.226           | -0.152          |                 | 0.0000 |
| 0.0125                    | 0.216           | -0.059          | -0.274          | 0.202           | -0.076          | -0.278          | 0.195           | -0.076          | -0.271          | 0.193           | -0.054          | -0.248          | 0.133           | -0.027          | -0.160          | 0.180           | -0.043          | -0.223          | 0.175           |                 |                 | 0.0125 |
| 0.0250                    | 0.163           | -0.053          | -0.216          | 0.164           | -0.075          | -0.239          | 0.165           | -0.086          | -0.251          | 0.158           | -0.067          | -0.225          | 0.158           | -0.040          | -0.198          |                 | -0.044          |                 | 0.138           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.112           | -0.051          | -0.163          | 0.123           | -0.072          | -0.195          | 0.123           | -0.090          | -0.213          |                 | -0.079          |                 | 0.121           | -0.029          | -0.150          | 0.115           | -0.058          | -0.172          | 0.107           | -0.071          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.109           | -0.055          | -0.159          | 0.099           | -0.070          | -0.169          | 0.101           | -0.086          | -0.187          | 0.096           |                 |                 | 0.096           | -0.052          | -0.148          | 0.093           | -0.061          | -0.154          | 0.090           | -0.064          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.090           | -0.052          | -0.142          | 0.086           | -0.069          | -0.155          | 0.083           | -0.082          | -0.165          | 0.080           | -0.078          | -0.159          | 0.083           | -0.059          | -0.142          | 0.078           | -0.069          | -0.147          | 0.081           | -0.077          | -0.158          | 0.1000 |
| 0.1500                    | 0.075           | -0.039          | -0.114          | 0.070           | -0.072          | -0.141          | 0.071           | -0.072          | -0.142          | 0.061           | -0.076          | -0.137          | 0.063           | -0.068          | -0.131          | 0.059           | -0.077          | -0.135          | 0.068           | -0.077          | -0.144          | 0.1500 |
| 0.2000                    | 0.063           | -0.040          | -0.103          | 0.062           | -0.061          | -0.124          | 0.059           | 0.011           | -0.047          | 0.054           |                 |                 | 0.057           | -0.072          | -0.128          | 0.052           | -0.071          | -0.123          | 0.054           | -0.080          | -0.134          | 0.2000 |
| 0.3000                    | 0.052           | -0.044          | -0.095          | 0.039           | -0.024          | -0.062          | 0.040           | -0.047          | -0.087          |                 |                 |                 | 0.046           | -0.070          | -0.116          | 0.038           | -0.083          | -0.122          | 0.054           | -0.081          | -0.135          | 0.3000 |
| 0.4000                    | 0.024           | -0.039          | -0.062          | 0.022           | -0.037          | -0.058          | 0.021           | -0.050          | -0.071          |                 |                 |                 | 0.033           | -0.058          | -0.091          | 0.035           | -0.090          | -0.125          | 0.034           | -0.084          | -0.118          | 0.4000 |
| 0.5000                    | 0.016           | -0.032          | -0.048          | 0.014           | -0.035          | -0.048          | 0.016           | -0.046          | -0.062          |                 |                 |                 | 0.019           | -0.044          | -0.064          | 0.025           | -0.093          | -0.117          | 0.028           | -0.090          | -0.117          | 0.5000 |
| 0.6000                    |                 | -0.040          |                 | 0.013           | -0.045          | -0.058          | 0.008           | -0.050          | -0.058          |                 |                 |                 | 0.013           | -0.051          | -0.063          | 0.038           | -0.095          | -0.132          | 0.024           | -0.096          | -0.120          | 0.6000 |
| 0.7000                    | 0.044           |                 |                 | 0.012           | -0.043          | -0.055          | 0.010           | -0.051          | -0.061          |                 |                 |                 | 0.020           | -0.055          | -0.074          | 0.031           | -0.086          | -0.117          | 0.021           | -0.093          | -0.115          | 0.7000 |
| 0.8000                    | 0.008           | -0.055          | -0.063          | 0.012           | -0.049          | -0.061          | 0.010           | -0.054          | -0.064          |                 |                 |                 | 0.028           | -0.051          | -0.079          | 0.013           | -0.084          | -0.097          | 0.019           | -0.093          | -0.111          | 0.8000 |
| 0.9000                    | 0.010           | -0.054          | -0.064          | 0.012           | -0.052          | -0.064          | 0.015           | -0.056          | -0.071          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

| x/c                      | 2y/b = 0.200             |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c |
|--------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----|
|                          | C <sub>pu</sub>          | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |     |
|                          | M = 2.230      α = 00.20 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | 0.218                    | -0.035          | -0.253          | 0.225           | -0.068          | -0.294          | 0.267           | -0.097          | -0.364          | 0.102           | -0.003          | -0.105          | 0.038           | 0.146           | 0.109           | 0.048           | 0.138           | 0.090           | 0.039           | 0.066           | 0.0000          |     |
| 0.0125                   | 0.160                    | -0.022          | -0.182          | 0.175           | -0.071          | -0.245          | 0.207           | -0.126          | -0.334          | 0.032           | 0.105           | 0.072           | 0.034           | 0.103           | 0.069           | 0.017           | 0.103           | 0.069           | 0.017           | 0.066           | 0.0125          |     |
| 0.0250                   | 0.116                    | -0.017          | -0.133          | 0.136           | -0.072          | -0.208          | 0.164           | -0.140          | -0.304          | 0.070           | -0.007          | -0.077          | 0.026           | 0.072           | 0.045           | 0.075           | 0.075           | 0.000           | 0.000           | 0.035           | 0.0250          |     |
| 0.0420                   | 0.072                    | -0.025          | -0.097          | 0.095           | -0.074          | -0.169          | 0.129           | -0.120          | -0.248          |                 |                 |                 | 0.014           | 0.032           | 0.018           | 0.001           | 0.038           | 0.037           | -0.015          | 0.024           | 0.0420          |     |
| 0.0500                   | 0.065                    | -0.034          | -0.099          | 0.076           | -0.077          | -0.153          | 0.090           | -0.093          | -0.184          | 0.019           |                 |                 | 0.012           | 0.007           | -0.005          | -0.014          | 0.020           | 0.033           | -0.025          | 0.0750          |                 |     |
| 0.0640                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |                 |     |
| 0.0750                   | 0.053                    | -0.035          | -0.088          | 0.062           | -0.081          | -0.143          | 0.060           | -0.060          | -0.120          | 0.009           | -0.032          | -0.040          | 0.001           | -0.008          | -0.009          | -0.023          | 0.010           | 0.032           | -0.029          | 0.0810          |                 |     |
| 0.0810                   | 0.044                    | -0.040          | -0.084          | 0.040           | -0.066          | -0.106          | 0.025           | -0.053          | -0.079          | -0.004          | -0.036          | -0.032          | -0.008          | -0.026          | -0.018          | -0.035          | -0.006          | 0.030           | -0.039          | 0.004           | 0.041           |     |
| 0.1000                   | 0.035                    | -0.052          | -0.087          | 0.023           | -0.033          | -0.056          | -0.002          | 0.045           | 0.047           | -0.010          |                 |                 | -0.014          | -0.022          | -0.008          | -0.033          | -0.014          | 0.020           | -0.052          | -0.004          | 0.048           |     |
| 0.1500                   | 0.004                    | -0.040          | -0.084          | 0.040           | -0.066          | -0.106          | 0.025           | -0.053          | -0.079          | -0.004          | -0.036          | -0.032          | -0.008          | -0.026          | -0.018          | -0.035          | -0.006          | 0.030           | -0.039          | 0.004           | 0.043           |     |
| 0.2000                   | 0.035                    | -0.052          | -0.087          | 0.023           | -0.033          | -0.056          | -0.002          | 0.045           | 0.047           | -0.010          |                 |                 | -0.014          | -0.022          | -0.008          | -0.033          | -0.014          | 0.020           | -0.052          | -0.004          | 0.048           |     |
| 0.3000                   | 0.026                    | -0.048          | -0.074          | -0.002          | -0.002          |                 | -0.013          | -0.024          | -0.011          |                 |                 |                 | -0.017          | -0.016          | 0.001           | -0.042          | -0.024          | 0.018           | -0.042          | -0.016          | 0.028           |     |
| 0.4000                   | -0.014                   | -0.019          | -0.005          | -0.019          | -0.019          |                 | -0.022          | -0.037          | -0.016          |                 |                 |                 | -0.025          | -0.025          | 0.000           | -0.038          | -0.021          | 0.018           | -0.060          | -0.026          | 0.034           |     |
| 0.5000                   | -0.027                   | -0.020          | 0.006           | -0.029          | -0.016          | 0.012           | -0.028          | -0.025          | 0.002           |                 |                 |                 | -0.031          | -0.033          | -0.002          | -0.042          | -0.027          | 0.016           | -0.063          | -0.030          | 0.032           |     |
| 0.6000                   |                          |                 |                 | -0.030          | -0.019          | 0.011           | -0.035          | -0.029          | 0.006           |                 |                 |                 | -0.034          | -0.027          | 0.007           | -0.028          | -0.036          | -0.009          | -0.063          | -0.037          | 0.026           |     |
| 0.7000                   | 0.009                    |                 | 0.007           | -0.027          | -0.023          | 0.004           | -0.033          | -0.030          | 0.003           |                 |                 |                 | -0.029          | -0.029          | 0.000           | -0.013          | -0.043          | -0.030          | -0.063          | -0.038          | 0.025           |     |
| 0.8000                   | -0.028                   | -0.033          | -0.005          | -0.028          | -0.028          | 0.000           | -0.031          | -0.030          | 0.001           |                 |                 |                 | -0.024          | -0.027          | -0.003          | -0.026          | -0.045          | -0.019          | -0.063          | -0.039          | 0.024           |     |
| 0.9000                   | -0.028                   | -0.033          | -0.005          | -0.028          | -0.033          | -0.005          | -0.027          | -0.040          | -0.014          |                 |                 |                 | -0.037          | -0.030          | 0.007           | -0.032          | -0.040          | -0.009          | -0.063          | -0.035          | 0.027           |     |
| 1.0000                   | 0.010                    | -0.027          | -0.038          | -0.025          | -0.036          | -0.011          | -0.020          | -0.060          | -0.041          |                 |                 |                 | -0.068          | -0.035          | 0.032           | -0.030          | -0.031          | -0.009          | -0.063          | -0.027          | 0.036           |     |
| M = 2.231      α = 04.18 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | 0.137                    | 0.031           | -0.107          | 0.141           | -0.051          | -0.192          | 0.058           | -0.118          | -0.176          |                 |                 |                 | -0.060          | 0.067           | 0.127           | -0.093          | 0.245           | 0.337           | -0.079          | 0.191           | 0.0000          |     |
| 0.0125                   | 0.093                    | 0.022           | -0.071          | 0.103           | -0.045          | -0.148          | 0.048           | -0.145          | -0.192          | -0.067          | -0.004          | 0.064           | -0.070          | 0.109           | 0.180           | -0.097          | 0.209           | 0.306           | -0.105          |                 | 0.0125          |     |
| 0.0250                   | 0.060                    | 0.016           | -0.044          | 0.073           | -0.040          | -0.113          | 0.037           | -0.153          | -0.189          | -0.069          | 0.027           | 0.096           | -0.075          | 0.130           | 0.206           |                 | 0.180           | 0.306           | -0.121          |                 | 0.0250          |     |
| 0.0420                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.156           |     |
| 0.0500                   | 0.026                    | 0.012           | -0.014          | 0.037           | -0.031          | -0.068          | 0.016           | -0.112          | -0.127          |                 | 0.063           |                 | -0.071          | 0.106           | 0.176           | -0.107          | 0.143           | 0.250           | -0.120          |                 | 0.0500          |     |
| 0.0640                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.140           |     |
| 0.0750                   | 0.022                    | 0.003           | -0.019          | 0.019           | -0.026          | -0.045          | -0.005          | -0.056          | -0.051          | -0.077          |                 |                 | -0.064          | 0.093           | 0.157           | -0.111          | 0.119           | 0.231           | -0.121          |                 | 0.0750          |     |
| 0.0810                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.130           |     |
| 0.1000                   | 0.013                    | 0.003           | -0.010          | 0.009           | -0.026          | -0.035          | -0.019          | -0.023          | -0.003          | -0.079          | 0.054           | 0.134           | -0.068          | 0.084           | 0.152           | -0.113          | 0.109           | 0.222           | -0.120          | 0.122           | 0.243           |     |
| 0.1500                   | 0.005                    | -0.005          | -0.010          | -0.015          | -0.022          | -0.007          | -0.035          | 0.010           | 0.045           | -0.078          | 0.051           | 0.130           | -0.072          | 0.074           | 0.146           | -0.117          | 0.087           | 0.204           | -0.123          | 0.110           | 0.232           |     |
| 0.2000                   | -0.009                   | -0.015          | -0.006          | -0.029          | -0.013          | 0.016           | -0.044          | 0.091           | 0.136           | -0.078          |                 |                 | -0.071          | 0.059           | 0.130           | -0.105          | 0.074           | 0.179           | -0.134          | 0.096           | 0.230           |     |
| 0.3000                   | -0.018                   | -0.023          | -0.005          | -0.045          | 0.035           | 0.080           | -0.060          | 0.038           | 0.097           |                 |                 |                 | -0.068          | 0.044           | 0.111           | -0.114          | 0.054           | 0.169           | -0.114          | 0.078           | 0.191           |     |
| 0.4000                   | -0.053                   | -0.001          | 0.052           | -0.062          | 0.017           | 0.079           | -0.068          | 0.026           | 0.093           |                 |                 |                 | -0.071          | 0.033           | 0.104           | -0.111          | 0.044           | 0.155           | -0.130          | 0.063           | 0.193           |     |
| 0.5000                   | -0.063                   | 0.017           | 0.080           | -0.068          | 0.024           | 0.091           | -0.070          | 0.022           | 0.092           |                 |                 |                 | -0.077          | 0.026           | 0.103           | -0.109          | 0.034           | 0.143           | -0.133          | 0.054           | 0.187           |     |
| 0.6000                   |                          | 0.016           |                 | -0.066          | 0.018           | 0.083           | -0.073          | 0.021           | 0.094           |                 |                 |                 | -0.076          | 0.019           | 0.095           | -0.095          | 0.023           | 0.118           | -0.129          | 0.042           | 0.171           |     |
| 0.7000                   | -0.018                   |                 |                 | -0.062          | 0.016           | 0.079           | -0.072          | 0.017           | 0.089           |                 |                 |                 | -0.068          | 0.017           | 0.086           | -0.085          | 0.016           | 0.100           | -0.127          | 0.036           | 0.163           |     |
| 0.8000                   | -0.058                   | -0.001          | 0.058           | -0.063          | 0.011           | 0.074           | -0.069          | 0.018           | 0.087           |                 |                 |                 | -0.057          | 0.016           | 0.073           | -0.082          | 0.011           | 0.093           | -0.123          | 0.033           | 0.156           |     |
| 0.9000                   | -0.058                   | 0.001           | 0.058           | -0.061          | 0.005           | 0.066           | -0.070          | 0.008           | 0.078           |                 |                 |                 | -0.067          | 0.009           | 0.076           | -0.080          | 0.007           | 0.087           | -0.121          | 0.036           | 0.156           |     |
| 1.0000                   | -0.016                   | 0.008           | 0.024           | -0.057          | -0.001          | 0.056           | -0.077          | -0.014          | 0.062           |                 |                 |                 | -0.097          | -0.003          | 0.094           | -0.077          | 0.006           | 0.082           | -0.119          | 0.043           | 0.163           |     |
| M = 2.236      α = 08.26 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.048                   | 0.159           | 0.207           | -0.082          | 0.165           | 0.246           | -0.101          | 0.185           | 0.286           |                 |                 |                 | -0.180          | 0.255           | 0.435           | -0.150          | 0.293           | 0.443           | -0.130          | 0.271           | 0.0000          |     |
| 0.0125                   | -0.051                   | 0.133           | 0.184           | -0.077          | 0.146           | 0.223           | -0.107          | 0.172           | 0.279           | -0.145          | 0.212           | 0.357           | -0.154          | 0.237           | 0.391           | -0.148          | 0.270           | 0.418           | -0.154          |                 | 0.0125          |     |
| 0.0250                   | -0.052                   | 0.114           | 0.166           | -0.075          | 0.130           | 0.205           | -0.113          | 0.159           | 0.272           | -0.142          | 0.189           | 0.331           | -0.138          | 0.222           | 0.360           |                 | 0.291           | 0.418           | -0.167          |                 | 0.0250          |     |
| 0.0420                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.241           |     |
| 0.0500                   | -0.049                   | 0.098           | 0.147           | -0.077          | 0.106           | 0.183           | -0.122          | 0.136           | 0.258           |                 | 0.164           |                 | -0.137          | 0.197           | 0.334           | -0.145          | 0.223           | 0.368           | -0.160          |                 | 0.0500          |     |
| 0.0640                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.228           |     |
| 0.0750                   | -0.048                   | 0.085           | 0.133           | -0.075          | 0.102           | 0.177           | -0.108          | 0.120           | 0.228           | -0.140          |                 |                 | -0.139          | 0.183           | 0.322           | -0.145          | 0.200           | 0.345           | -0.158          |                 | 0.0750          |     |
| 0.0810                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.220           |     |
| 0.1000                   | -0.056                   | 0.087           | 0.143           | -0.078          | 0.094           | 0.172           | -0.092          | 0.111           | 0.202           | -0.141          | 0.138           | 0.279           | -0.142          | 0.159           | 0.301           | -0.145          | 0.187           | 0.332           | -0.156          | 0.212           | 0.368           |     |
| 0.1500                   | -0.069                   | 0.078           | 0.147           | -0.085          | 0.087           | 0.171           | -0.095          | 0.105           | 0.201           | -0.136          | 0.125           | 0.262           | -0.139          | 0.146           | 0.285           | -0.154          | 0.163           | 0.317           | -0.154          | 0.198           | 0.352           |     |
| 0.2000                   | -0.080                   | 0.066           | 0.145           | -0.088          | 0.083           | 0.171           | -0.096          | 0.120           | 0.216           | -0.101          |                 |                 | -0.142          | 0.130           | 0.271           | -0.141          | 0.149           | 0.290           | -0.166          | 0.184           | 0.350           |     |
| 0.3000                   | -0.087                   | 0.060           | 0.147           | -0.099          | 0.094           | 0.193           | -0.098          | 0.098           | 0.196           |                 |                 |                 | -0.137          | 0.110           | 0.247           | -0.152          | 0.128           | 0.281           | -0.145          | 0.161           | 0.305           |     |
| 0.4000                   | -0.100                   | 0.059           | 0.159           | -0.102          | 0.069           | 0.171           | -0.101          | 0.087           | 0.188           |                 |                 |                 | -0.112          | 0.102           | 0.214           | -0.150          | 0.115           | 0.265           | -0.161          | 0.143           | 0.304           |     |
| 0.5000                   | -0.097                   | 0.064           | 0.161           | -0.098          | 0.068           | 0.166           | -0.100          | 0.069           | 0.168           |                 |                 |                 | -0.102          | 0.092           | 0.192           | -0.150          | 0.108           | 0.251           | -0.166          | 0.130           | 0.295           |     |
| 0.6000                   |                          | 0.056           |                 | -0.094          | 0.056           | 0.149           | -0.099          | 0.062           | 0.161           |                 |                 |                 | -0.097          | 0.080           | 0.177           | -0.153          | 0.088           | 0.241           | -0.166          | 0.116           | 0.282           |     |
| 0.7000                   | -0.041                   |                 |                 | -0.092          | 0.058           | 0.150           | -0.097          | 0.061           | 0.158           |                 |                 |                 | -0.093          | 0.069           | 0.162           | -0.150          | 0.080           | 0.230           | -0.165          | 0.112           | 0.277           |     |
| 0.8000                   | -0.082                   | 0.045           | 0.128           | -0.092          | 0.056           | 0.148           | -0.098          | 0.061           | 0.159           |                 |                 |                 | -0.064          | 0.065           | 0.129           | -0.148          | 0.070           | 0.218           | -0.162          | 0.107           | 0.269           |     |
| 0.9000                   | -0.086                   | 0.049           | 0.135           | -0.090          | 0.052           | 0.142           | -0.097          | 0.053           | 0.150           |                 |                 |                 | -0.089          | 0.058           | 0.147           | -0.145          | 0.061           | 0.207           | -0.161          | 0.108           | 0.268           |     |
| 1.0000                   | -0.051                   | 0.059           | 0.110           | -0.086          | 0.046           | 0.132           | -0.096          | 0.038           | 0.133           |                 |                 |                 | -0.168          | 0.048           | 0.215           | -0.143          | 0.053           | 0.196           | -0.160          | 0.115           | 0.275           |     |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Concluded

| x/c                        | 2y/b=0.200 |           |              | 2y/b=0.250 |           |              | 2y/b=0.300 |           |              | 2y/b=0.350 |           |              | 2y/b=0.400 |           |              | 2y/b=0.600 |           |              | 2y/b=0.800 |           |              | x/c    |
|----------------------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|--------|
|                            | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ | $C_{p_u}$  | $C_{p_l}$ | $\Delta C_p$ |        |
| M = 2.232 $\alpha = 12.24$ |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |        |
| 0.0000                     | -0.110     | 0.227     | 0.337        | -0.142     | 0.296     | 0.438        | -0.161     | 0.297     | 0.458        | -0.170     | 0.288     | 0.458        | -0.184     | 0.303     | 0.487        | -0.167     | 0.304     | 0.471        | -0.149     | 0.298     |              | 0.0000 |
| 0.0125                     | -0.113     | 0.231     | 0.344        | -0.138     | 0.276     | 0.415        | -0.158     | 0.279     | 0.438        | -0.170     | 0.288     | 0.458        | -0.173     | 0.301     | 0.474        | -0.166     | 0.310     | 0.475        | -0.168     |           |              | 0.0125 |
| 0.0250                     | -0.115     | 0.228     | 0.343        | -0.137     | 0.258     | 0.395        | -0.157     | 0.264     | 0.421        | -0.168     | 0.279     | 0.447        | -0.165     | 0.296     | 0.462        | -0.163     | 0.309     |              | -0.179     |           |              | 0.0250 |
| 0.0420                     |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              | 0.0420 |
| 0.0500                     | -0.114     | 0.204     | 0.317        | -0.143     | 0.226     | 0.369        | -0.157     | 0.243     | 0.400        |            | 0.255     |              | -0.160     | 0.276     | 0.436        | -0.163     | 0.292     | 0.456        | -0.173     | 0.307     |              | 0.0500 |
| 0.0640                     |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              | 0.0640 |
| 0.0750                     | -0.107     | 0.185     | 0.292        | -0.146     | 0.214     | 0.360        | -0.161     | 0.232     | 0.393        | -0.164     |           |              | -0.166     | 0.261     | 0.427        | -0.163     | 0.275     | 0.438        | -0.174     | 0.301     |              | 0.0750 |
| 0.0810                     |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              | 0.0810 |
| 0.1000                     | -0.105     | 0.181     | 0.287        | -0.145     | 0.196     | 0.341        | -0.155     | 0.211     | 0.365        | -0.164     | 0.227     | 0.391        | -0.167     | 0.248     | 0.415        | -0.163     | 0.265     | 0.428        | -0.171     | 0.291     |              | 0.1000 |
| 0.1500                     | -0.108     | 0.166     | 0.275        | -0.139     | 0.178     | 0.316        | -0.150     | 0.190     | 0.340        | -0.164     | 0.210     | 0.373        | -0.166     | 0.227     | 0.393        | -0.173     | 0.246     | 0.419        | -0.170     | 0.285     | 0.457        | 0.1500 |
| 0.2000                     | -0.113     | 0.153     | 0.266        | -0.124     | 0.174     | 0.298        | -0.158     | 0.230     | 0.389        | -0.157     |           |              | -0.167     | 0.204     | 0.372        | -0.161     | 0.234     | 0.394        | -0.182     | 0.258     | 0.441        | 0.2000 |
| 0.3000                     | -0.112     | 0.146     | 0.259        | -0.121     | 0.169     | 0.289        | -0.150     | 0.169     | 0.319        |            |           |              | -0.168     | 0.204     | 0.372        | -0.161     | 0.234     | 0.394        | -0.182     | 0.258     | 0.441        | 0.3000 |
| 0.4000                     | -0.118     | 0.142     | 0.260        | -0.120     | 0.149     | 0.269        | -0.135     | 0.150     | 0.285        |            |           |              | -0.167     | 0.183     | 0.349        | -0.172     | 0.206     | 0.378        | -0.159     | 0.241     | 0.400        | 0.4000 |
| 0.5000                     | -0.111     | 0.135     | 0.246        | -0.114     | 0.134     | 0.248        | -0.115     | 0.140     | 0.256        |            |           |              | -0.156     | 0.174     | 0.329        | -0.171     | 0.189     | 0.360        | -0.179     | 0.225     | 0.404        | 0.5000 |
| 0.6000                     |            | 0.119     |              | -0.107     | 0.120     | 0.227        | -0.115     | 0.127     | 0.242        |            |           |              | -0.159     | 0.152     | 0.311        | -0.171     | 0.174     | 0.345        | -0.183     | 0.214     | 0.397        | 0.6000 |
| 0.7000                     | -0.050     |           |              | -0.107     | 0.122     | 0.229        | -0.115     | 0.127     | 0.242        |            |           |              | -0.157     | 0.140     | 0.297        | -0.176     | 0.158     | 0.334        | -0.183     | 0.197     | 0.380        | 0.7000 |
| 0.8000                     | -0.097     | 0.104     | 0.202        | -0.109     | 0.115     | 0.225        | -0.114     | 0.122     | 0.235        |            |           |              | -0.140     | 0.130     | 0.269        | -0.176     | 0.145     | 0.321        | -0.181     | 0.189     | 0.370        | 0.8000 |
| 0.9000                     | -0.105     | 0.110     | 0.215        | -0.108     | 0.117     | 0.224        | -0.121     | 0.115     | 0.236        |            |           |              | -0.122     | 0.124     | 0.246        | -0.175     | 0.134     | 0.309        | -0.180     | 0.180     | 0.359        | 0.9000 |
| 1.0000                     | -0.075     | 0.123     | 0.198        | -0.103     | 0.126     | 0.228        | -0.136     | 0.103     | 0.239        |            |           |              | -0.105     | 0.120     | 0.224        | -0.174     | 0.125     | 0.299        | -0.176     | 0.177     | 0.353        | 1.0000 |
|                            |            |           |              |            |           |              |            |           |              |            |           |              | -0.088     | 0.116     | 0.204        | -0.173     | 0.117     | 0.290        | -0.171     | 0.181     | 0.352        |        |
| M = 2.232 $\alpha = 16.26$ |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |        |
| 0.0000                     | -0.161     | 0.239     | 0.400        | -0.161     | 0.222     | 0.382        | -0.170     | 0.322     | 0.491        | -0.173     | 0.334     | 0.503        | -0.217     | 0.331     | 0.548        | -0.174     | 0.315     | 0.488        | -0.152     | 0.322     |              | 0.0000 |
| 0.0125                     | -0.161     | 0.289     | 0.450        | -0.158     | 0.257     | 0.416        | -0.173     | 0.330     | 0.503        | -0.173     | 0.334     | 0.503        | -0.189     | 0.346     | 0.535        | -0.172     | 0.352     | 0.524        | -0.173     |           |              | 0.0125 |
| 0.0250                     | -0.161     | 0.315     | 0.476        | -0.159     | 0.280     | 0.439        | -0.175     | 0.333     | 0.509        | -0.175     | 0.348     | 0.523        | -0.174     | 0.353     | 0.527        |            | 0.373     |              | -0.185     |           |              | 0.0250 |
| 0.0420                     |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              | 0.0420 |
| 0.0500                     | -0.158     | 0.293     | 0.451        | -0.168     | 0.285     | 0.453        | -0.176     | 0.323     | 0.498        |            | 0.338     |              | -0.177     | 0.344     | 0.521        | -0.170     | 0.369     | 0.539        | -0.178     | 0.368     |              | 0.0500 |
| 0.0640                     |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              | 0.0640 |
| 0.0750                     | -0.153     | 0.254     | 0.408        | -0.171     | 0.291     | 0.462        | -0.177     | 0.304     | 0.481        | -0.171     |           |              | -0.180     | 0.331     | 0.510        | -0.170     | 0.360     | 0.529        | -0.178     | 0.372     |              | 0.0750 |
| 0.0810                     |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              |            |           |              | 0.0810 |
| 0.1000                     | -0.147     | 0.228     | 0.375        | -0.172     | 0.283     | 0.454        | -0.176     | 0.300     | 0.476        | -0.171     | 0.308     | 0.479        | -0.182     | 0.323     | 0.505        | -0.170     | 0.351     | 0.521        | -0.178     | 0.366     |              | 0.1000 |
| 0.1500                     | -0.143     | 0.174     | 0.317        | -0.170     | 0.278     | 0.448        | -0.177     | 0.281     | 0.458        | -0.173     | 0.291     | 0.463        | -0.179     | 0.304     | 0.483        | -0.182     | 0.334     | 0.515        | -0.177     | 0.353     | 0.542        | 0.1500 |
| 0.2000                     | -0.146     | 0.162     | 0.308        | -0.165     | 0.271     | 0.436        | -0.181     | 0.307     | 0.489        | -0.171     |           |              | -0.183     | 0.285     | 0.468        | -0.167     | 0.313     | 0.480        | -0.188     | 0.347     | 0.535        | 0.2000 |
| 0.3000                     | -0.136     | 0.206     | 0.342        | -0.162     | 0.255     | 0.417        | -0.180     | 0.258     | 0.438        |            |           |              | -0.182     | 0.262     | 0.444        | -0.181     | 0.284     | 0.466        | -0.163     | 0.330     | 0.493        | 0.3000 |
| 0.4000                     | -0.139     | 0.222     | 0.361        | -0.159     | 0.230     | 0.389        | -0.172     | 0.234     | 0.406        |            |           |              | -0.179     | 0.248     | 0.427        | -0.181     | 0.266     | 0.447        | -0.186     | 0.308     | 0.494        | 0.4000 |
| 0.5000                     | -0.133     | 0.202     | 0.335        | -0.148     | 0.207     | 0.356        | -0.164     | 0.218     | 0.382        |            |           |              | -0.179     | 0.228     | 0.407        | -0.181     | 0.249     | 0.430        | -0.189     | 0.293     | 0.482        | 0.5000 |
| 0.6000                     |            | 0.207     |              | -0.138     | 0.204     | 0.342        | -0.165     | 0.209     | 0.374        |            |           |              | -0.179     | 0.213     | 0.391        | -0.185     | 0.236     | 0.421        | -0.189     | 0.275     | 0.464        | 0.6000 |
| 0.7000                     | -0.068     |           |              | -0.136     | 0.191     | 0.326        | -0.161     | 0.200     | 0.361        |            |           |              | -0.170     | 0.205     | 0.375        | -0.185     | 0.227     | 0.413        | -0.187     | 0.266     | 0.454        | 0.7000 |
| 0.8000                     | -0.119     | 0.172     | 0.291        | -0.132     | 0.185     | 0.318        | -0.152     | 0.193     | 0.345        |            |           |              | -0.158     | 0.194     | 0.352        | -0.185     | 0.216     | 0.401        | -0.186     | 0.258     | 0.444        | 0.8000 |
| 0.9000                     | -0.127     | 0.178     | 0.306        | -0.127     | 0.185     | 0.312        | -0.153     | 0.184     | 0.337        |            |           |              | -0.146     | 0.190     | 0.335        | -0.185     | 0.204     | 0.389        | -0.184     | 0.260     | 0.444        | 0.9000 |
| 1.0000                     | -0.093     | 0.200     | 0.293        | -0.120     | 0.188     | 0.308        | -0.163     | 0.172     | 0.336        |            |           |              | -0.133     | 0.192     | 0.325        | -0.185     | 0.190     | 0.376        | -0.181     | 0.273     | 0.455        | 1.0000 |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(d) BW

51  
80

| x/c                       | 2y/b = 0.200              |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub>           | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
|                           | M = 0.698      α = -04.42 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.227                     | -0.458          | -0.684          | 0.196           | -0.735          | -0.931          | 0.196           | -0.733          | -0.929          |                 |                 |                 | 0.062           | -0.721          | -0.783          | 0.194           | -0.653          | -0.847          | 0.198           | -0.560          |                 | 0.0000 |
| 0.0125                    | 0.159                     | -0.325          | -0.485          | 0.148           | -0.484          | -0.631          | 0.153           | -0.571          | -0.725          | 0.148           | -0.674          | -0.821          | 0.115           | -0.718          | -0.833          | 0.173           | -0.651          | -0.824          | 0.186           |                 |                 | 0.0125 |
| 0.0250                    | 0.111                     | -0.240          | -0.351          | 0.110           | -0.319          | -0.430          | 0.121           | -0.461          | -0.582          | 0.115           | -0.377          | -0.493          | 0.139           | -0.657          | -0.797          |                 | -0.651          |                 | 0.173           |                 |                 | 0.0250 |
| 0.0420                    |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.550          |                 | 0.0420 |
| 0.0500                    | 0.070                     | -0.208          | -0.279          | 0.070           | -0.253          | -0.323          | 0.085           | -0.397          | -0.483          |                 | -0.325          |                 | 0.102           | -0.363          | -0.465          | 0.127           | -0.657          | -0.784          | 0.146           |                 |                 | 0.0500 |
| 0.0640                    |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.548          |                 | 0.0640 |
| 0.0750                    | 0.053                     | -0.201          | -0.254          | 0.044           | -0.233          | -0.277          | 0.058           | -0.281          | -0.339          | -0.002          |                 |                 | 0.063           | -0.297          | -0.360          | 0.111           | -0.667          | -0.779          | 0.120           |                 |                 | 0.0750 |
| 0.0810                    |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.548          |                 | 0.0810 |
| 0.1000                    | 0.033                     | -0.195          | -0.228          | 0.030           | -0.222          | -0.252          | 0.043           | -0.268          | -0.310          | 0.040           | -0.284          | -0.324          | 0.043           | -0.279          | -0.322          | 0.079           | -0.676          | -0.755          | 0.107           | -0.550          | -0.657          | 0.1000 |
| 0.1500                    | 0.016                     | -0.184          | -0.200          | 0.011           | -0.192          | -0.216          | 0.028           | -0.237          | -0.265          | 0.024           | -0.256          | -0.280          | 0.029           | -0.263          | -0.292          | 0.056           | -0.657          | -0.713          | 0.092           | -0.551          | -0.642          | 0.1500 |
| 0.2000                    | 0.004                     | -0.184          | -0.187          | 0.004           | -0.192          | -0.197          | 0.022           | -0.212          | -0.234          | 0.010           |                 |                 | 0.019           | -0.241          | -0.261          | 0.041           | -0.391          | -0.432          | 0.072           | -0.557          | -0.630          | 0.2000 |
| 0.3000                    | -0.008                    | -0.188          | -0.180          | -0.015          | -0.188          | -0.173          | -0.003          | -0.201          | -0.197          |                 |                 |                 | 0.007           | -0.230          | -0.237          | 0.023           | -0.193          | -0.215          | 0.067           | -0.572          | -0.639          | 0.3000 |
| 0.4000                    | -0.020                    | -0.187          | -0.167          | -0.022          | -0.182          | -0.159          | -0.015          | -0.192          | -0.177          |                 |                 |                 | -0.008          | -0.197          | -0.139          | 0.014           | -0.185          | -0.199          | 0.037           | -0.569          | -0.606          | 0.4000 |
| 0.5000                    | -0.031                    | -0.172          | -0.140          | -0.027          | -0.174          | -0.147          | -0.019          | -0.179          | -0.160          |                 |                 |                 | -0.009          | -0.172          | -0.163          | 0.002           | -0.167          | -0.169          | 0.022           | -0.523          | -0.545          | 0.5000 |
| 0.6000                    |                           | -0.160          |                 | -0.023          | -0.158          | -0.135          | -0.024          | -0.160          | -0.136          |                 |                 |                 | -0.014          | -0.155          | -0.142          | -0.002          | -0.152          | -0.150          | 0.010           | -0.456          | -0.466          | 0.6000 |
| 0.7000                    | -0.030                    |                 |                 | -0.033          | -0.137          | -0.104          | -0.026          | -0.134          | -0.108          |                 |                 |                 | -0.015          | -0.133          | -0.118          | -0.004          | -0.126          | -0.122          | 0.004           | -0.335          | -0.339          | 0.7000 |
| 0.8000                    | -0.035                    | -0.111          | -0.077          | -0.031          | -0.105          | -0.073          | -0.025          | -0.114          | -0.089          |                 |                 |                 | -0.018          | -0.103          | -0.085          | -0.006          | -0.093          | -0.087          | 0.001           | -0.149          | -0.150          | 0.8000 |
| 0.9000                    | -0.022                    | -0.060          | -0.037          | -0.016          | -0.051          | -0.035          | -0.017          | -0.062          | -0.045          |                 |                 |                 | 0.008           | -0.070          | -0.078          | 0.007           | -0.058          | -0.065          | -0.011          | -0.033          | -0.023          | 0.9000 |
| 1.0000                    | 0.007                     | 0.011           | 0.003           | 0.013           | 0.024           | 0.010           | -0.001          | 0.023           | 0.024           |                 |                 |                 | 0.062           | -0.035          | -0.097          | 0.035           | -0.020          | -0.054          | -0.031          | 0.012           | 0.043           | 1.0000 |
| M = 0.700      α = -00.06 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.009                    | 0.031           | 0.040           | -0.084          | 0.008           | 0.092           | -0.100          | -0.010          | 0.090           |                 |                 |                 | -0.100          | -0.002          | 0.098           | -0.154          | 0.005           | 0.158           | -0.102          | -0.014          |                 | 0.0000 |
| 0.0125                    | -0.056                    | 0.000           | 0.056           | -0.098          | 0.025           | 0.073           | -0.107          | -0.032          | 0.075           | -0.113          | -0.042          | 0.071           | -0.117          | -0.030          | 0.087           | -0.151          | -0.024          | 0.127           | -0.161          |                 |                 | 0.0125 |
| 0.0250                    | -0.087                    | -0.024          | 0.062           | -0.107          | -0.049          | 0.058           | -0.113          | -0.049          | 0.064           | -0.130          | -0.052          | 0.078           | -0.130          | -0.053          | 0.077           |                 | -0.048          |                 | -0.193          |                 |                 | 0.0250 |
| 0.0420                    |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.057          |                 | 0.0420 |
| 0.0500                    | -0.099                    | -0.054          | 0.045           | -0.111          | -0.072          | 0.040           | -0.124          | -0.070          | 0.054           |                 | -0.081          |                 | -0.138          | -0.080          | 0.059           | -0.151          | -0.081          | 0.071           | -0.173          |                 |                 | 0.0500 |
| 0.0640                    |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.070          |                 | 0.0640 |
| 0.0750                    | -0.097                    | -0.067          | 0.030           | -0.115          | -0.079          | 0.036           | -0.122          | -0.087          | 0.035           | -0.125          |                 |                 | -0.140          | -0.088          | 0.051           | -0.157          | -0.087          | 0.070           | -0.169          |                 |                 | 0.0750 |
| 0.0810                    |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.076          |                 | 0.0810 |
| 0.1000                    | -0.105                    | -0.072          | 0.032           | -0.118          | -0.089          | 0.029           | -0.128          | -0.091          | 0.037           | -0.138          | -0.093          | 0.045           | -0.143          | -0.095          | 0.047           | -0.158          | -0.094          | 0.065           | -0.165          | -0.078          | 0.087           | 0.1000 |
| 0.1500                    | -0.109                    | -0.077          | 0.032           | -0.119          | -0.091          | 0.028           | -0.124          | -0.098          | 0.027           | -0.136          | -0.100          | 0.036           | -0.142          | -0.095          | 0.047           | -0.149          | -0.098          | 0.051           | -0.158          | -0.080          | 0.077           | 0.1500 |
| 0.2000                    | -0.108                    | -0.085          | 0.023           | -0.118          | -0.091          | 0.027           | -0.116          | -0.089          | 0.027           | -0.129          |                 |                 | -0.135          | -0.103          | 0.031           | -0.143          | -0.103          | 0.040           | -0.150          | -0.087          | 0.063           | 0.2000 |
| 0.3000                    | -0.112                    | -0.100          | 0.013           | -0.118          | -0.096          | 0.022           | -0.122          | -0.107          | 0.016           |                 |                 |                 | -0.124          | -0.100          | 0.024           | -0.126          | -0.106          | 0.020           | -0.136          | -0.093          | 0.043           | 0.3000 |
| 0.4000                    | -0.117                    | -0.108          | 0.008           | -0.116          | -0.101          | 0.015           | -0.117          | -0.100          | 0.017           |                 |                 |                 | -0.114          | -0.095          | 0.019           | -0.113          | -0.103          | 0.010           | -0.129          | -0.089          | 0.040           | 0.4000 |
| 0.5000                    | -0.115                    | -0.101          | 0.014           | -0.111          | -0.102          | 0.009           | -0.111          | -0.097          | 0.013           |                 |                 |                 | -0.107          | -0.092          | 0.015           | -0.102          | -0.091          | 0.011           | -0.114          | -0.078          | 0.037           | 0.5000 |
| 0.6000                    |                           | -0.100          |                 | -0.097          | -0.099          | -0.002          | -0.104          | -0.095          | 0.010           |                 |                 |                 | -0.096          | -0.089          | 0.007           | -0.092          | -0.081          | 0.010           | -0.098          | -0.077          | 0.021           | 0.6000 |
| 0.7000                    | -0.094                    |                 |                 | -0.095          | -0.090          | 0.005           | -0.094          | -0.084          | 0.009           |                 |                 |                 | -0.084          | -0.082          | 0.002           | -0.076          | -0.072          | 0.003           | -0.084          | -0.062          | 0.021           | 0.7000 |
| 0.8000                    | -0.085                    | -0.078          | 0.007           | -0.078          | -0.072          | 0.006           | -0.081          | -0.066          | 0.014           |                 |                 |                 | -0.067          | -0.072          | -0.005          | -0.065          | -0.057          | 0.009           | -0.062          | -0.047          | 0.015           | 0.8000 |
| 0.9000                    | -0.053                    | -0.043          | 0.009           | -0.049          | -0.037          | 0.011           | -0.049          | -0.037          | 0.012           |                 |                 |                 | -0.035          | -0.035          | 0.000           | -0.029          | -0.031          | -0.001          | -0.043          | -0.012          | 0.031           | 0.9000 |
| 1.0000                    | 0.002                     | 0.006           | 0.004           | -0.007          | 0.014           | 0.020           | 0.001           | 0.004           | 0.003           |                 |                 |                 | 0.011           | 0.029           | 0.018           | 0.032           | 0.005           | -0.027          | -0.025          | 0.043           | 0.068           | 1.0000 |
| M = 0.699      α = 03.83  |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.405                    | 0.213           | 0.618           | -0.676          | 0.210           | 0.885           | -0.771          | 0.195           | 0.966           |                 |                 |                 | -0.645          | 0.203           | 0.848           | -0.685          | 0.162           | 0.847           | -0.557          | 0.202           |                 | 0.0000 |
| 0.0125                    | -0.357                    | 0.174           | 0.531           | -0.566          | 0.163           | 0.729           | -0.680          | 0.165           | 0.844           | -0.839          | 0.165           | 1.004           | -0.763          | 0.170           | 0.933           | -0.681          | 0.168           | 0.849           | -0.564          |                 |                 | 0.0125 |
| 0.0250                    | -0.315                    | 0.141           | 0.456           | -0.465          | 0.126           | 0.591           | -0.581          | 0.138           | 0.719           | -0.608          | 0.132           | 0.741           | -0.785          | 0.141           | 0.926           |                 | 0.164           |                 | -0.568          |                 |                 | 0.0250 |
| 0.0420                    |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.158           |                 | 0.0420 |
| 0.0500                    | -0.252                    | 0.090           | 0.342           | -0.287          | 0.082           | 0.368           | -0.365          | 0.092           | 0.457           |                 | 0.090           |                 | -0.537          | 0.099           | 0.636           | -0.680          | 0.126           | 0.806           | -0.568          |                 |                 | 0.0500 |
| 0.0640                    |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.140           |                 | 0.0640 |
| 0.0750                    | -0.224                    | 0.065           | 0.289           | -0.266          | 0.059           | 0.324           | -0.296          | 0.069           | 0.365           | -0.332          |                 |                 | -0.357          | 0.076           | 0.433           | -0.688          | 0.105           | 0.793           | -0.564          |                 |                 | 0.0750 |
| 0.0810                    |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.127           |                 | 0.0810 |
| 0.1000                    | -0.224                    | 0.052           | 0.275           | -0.252          | 0.040           | 0.292           | -0.286          | 0.049           | 0.335           | -0.315          | 0.044           | 0.359           | -0.301          | 0.057           | 0.358           | -0.695          | 0.086           | 0.781           | -0.564          | 0.111           | 0.676           | 0.1000 |
| 0.1500                    | -0.217                    | 0.033           | 0.250           | -0.234          | 0.026           | 0.261           | -0.252          | 0.029           | 0.282           | -0.277          | 0.022           | 0.299           | -0.275          | 0.034           | 0.310           | -0.702          | 0.068           | 0.770           | -0.564          | 0.101           | 0.665           | 0.1500 |
| 0.2000                    | -0.205                    | 0.019           | 0.224           | -0.220          | 0.020           | 0.239           | -0.234          | 0.028           | 0.262           | -0.257          |                 |                 | -0.253          | 0.026           | 0.279           | -0.625          | 0.048           | 0.673           | -0.565          | 0.073           | 0.638           | 0.2000 |
| 0.3000                    | -0.201                    | -0.003          | 0.198           | -0.208          | -0.002          | 0.206           | -0.219          | 0.007           | 0.225           |                 |                 |                 | -0.226          | -0.004          | 0.222           | -0.250          | 0.017           | 0.267           | -0.574          | 0.048           | 0.622           | 0.3000 |
| 0.4000                    | -0.196                    | -0.022          | 0.173           | -0.195          | -0.017          | 0.178           | -0.204          | -0.015          | 0.189           |                 |                 |                 | -0.207          | 0.002           | 0.209           | -0.166          | 0.007           | 0.173           | -0.582          | 0.028           | 0.610           | 0.4000 |
| 0.5000                    | -0.186                    | -0.024          | 0.163           | -0.179          | -0.026          | 0.153           | -0.184          | -0.022          | 0.162           |                 |                 |                 | -0.184          | -0.010          | 0.174           | -0.156          | 0.000           | 0.156           | -0.582          | 0.016           | 0.598           | 0.5000 |
| 0.6000                    |                           | -0.032          |                 | -0.155          | -0.032          | 0.124           | -0.165          | -0.027          | 0.139           |                 |                 |                 | -0.164          | -0.016          | 0.148           | -0.141          | -0.010          | 0.131           | -0.536          | 0.004           | 0.540           | 0.6000 |
| 0.7000                    | -0.141                    |                 |                 | -0.141          | -0.034          | 0.107           | -0.142          | -0.028          | 0.114           |                 |                 |                 | -0.137          | -0.021          | 0.116           | -0.125          | -0.015          | 0.110           | -0.453          | -0.007          | 0.446           | 0.7000 |
| 0.8000                    | -0.117                    | -0.034          | 0.083           | -0.112          | -0.029          | 0.083           | -0.126          | -0.026          | 0.100           |                 |                 |                 | -0.105          | -0.024          | 0.081           | -0.098          | -0.014          | 0.084           | -0.335          | -0.010          | 0.325           | 0.8000 |
| 0.9000                    | -0.072                    | -0.017          | 0.055           | -0.065          | -0.009          | 0.056           | -0.082          | -0.018          | 0.064           |                 |                 | </              |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(d) BW - Continued

| x/c                      | 2y/b = 0.200             |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub>          | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
|                          | M = 0.700      α = 07.76 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.969                   | 0.251           | 2.220           | -1.013          | 0.201           | 1.214           | -1.115          | 0.175           | 1.290           |                 |                 |                 | -0.915          | 0.102           | 1.016           | -0.814          | -0.027          | 0.787           | -0.642          | 0.193           |                 | 0.0000 |
| 0.0125                   | -1.075                   | 0.271           | 1.347           | -1.192          | 0.229           | 1.421           | -1.061          | 0.201           | 1.262           | -0.982          | 0.168           | 1.151           | -0.935          | 0.170           | 1.105           | -0.814          | 0.111           | 0.926           | -0.643          |                 |                 | 0.0125 |
| 0.0250                   | -0.523                   | 0.274           | 0.797           | -1.265          | 0.240           | 1.505           | -1.069          | 0.215           | 1.285           | -0.993          | 0.209           | 1.202           | -0.954          | 0.211           | 1.165           |                 | 0.194           |                 | -0.643          |                 |                 | 0.0250 |
| 0.0420                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.441                   | 0.227           | 0.668           | -1.091          | 0.209           | 1.300           | -1.276          | 0.205           | 1.481           |                 | 0.209           |                 | -0.987          | 0.209           | 1.196           | -0.819          | 0.190           | 1.009           | -0.640          | 0.188           |                 | 0.0500 |
| 0.0640                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.400                   | 0.195           | 0.594           | -0.337          | 0.184           | 0.521           | -1.308          | 0.187           | 1.494           | -1.294          |                 |                 | -1.097          | 0.192           | 1.289           | -0.825          | 0.201           | 1.026           | -0.642          | 0.192           |                 | 0.0750 |
| 0.0810                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.381                   | 0.174           | 0.555           | -0.335          | 0.163           | 0.498           | -0.883          | 0.167           | 1.049           | -1.349          | 0.168           | 1.517           | -1.210          | 0.177           | 1.388           | -0.840          | 0.183           | 1.023           | -0.640          | 0.191           | 0.832           | 0.1000 |
| 0.1500                   | -0.362                   | 0.147           | 0.509           | -0.346          | 0.139           | 0.485           | -0.261          | 0.146           | 0.407           | -0.831          | 0.146           | 0.977           | -1.259          | 0.145           | 1.404           | -0.866          | 0.159           | 1.025           | -0.638          | 0.181           | 0.819           | 0.1500 |
| 0.2000                   | -0.336                   | 0.126           | 0.461           | -0.331          | 0.121           | 0.451           | -0.294          | 0.133           | 0.427           | -0.281          |                 |                 | -0.922          | 0.129           | 1.051           | -0.904          | 0.138           | 1.042           | -0.635          | 0.164           | 0.799           | 0.2000 |
| 0.3000                   | -0.321                   | 0.090           | 0.411           | -0.317          | 0.091           | 0.408           | -0.302          | 0.090           | 0.392           |                 |                 |                 | -0.216          | 0.102           | 0.318           | -1.162          | 0.109           | 1.271           | -0.637          | 0.139           | 0.775           | 0.3000 |
| 0.4000                   | -0.295                   | 0.064           | 0.359           | -0.292          | 0.069           | 0.361           | -0.292          | 0.070           | 0.362           |                 |                 |                 | -0.226          | 0.088           | 0.313           | -1.159          | 0.080           | 1.239           | -0.636          | 0.112           | 0.748           | 0.4000 |
| 0.5000                   | -0.272                   | 0.053           | 0.325           | -0.263          | 0.049           | 0.312           | -0.257          | 0.050           | 0.307           |                 |                 |                 | -0.219          | 0.070           | 0.288           | -0.938          | 0.073           | 1.011           | -0.613          | 0.094           | 0.707           | 0.5000 |
| 0.6000                   |                          | 0.035           |                 | -0.224          | 0.034           | 0.258           | -0.236          | 0.041           | 0.277           |                 |                 |                 | -0.205          | 0.057           | 0.262           | -0.453          | 0.051           | 0.504           | -0.598          | 0.058           | 0.656           | 0.6000 |
| 0.7000                   | -0.193                   |                 |                 | -0.195          | 0.020           | 0.215           | -0.193          | 0.028           | 0.221           |                 |                 |                 | -0.164          | 0.037           | 0.200           | -0.150          | 0.036           | 0.185           | -0.581          | 0.016           | 0.597           | 0.7000 |
| 0.8000                   | -0.151                   | 0.007           | 0.159           | -0.147          | 0.011           | 0.158           | -0.155          | 0.019           | 0.175           |                 |                 |                 | -0.130          | 0.023           | 0.153           | -0.037          | 0.022           | 0.059           | -0.643          | -0.018          | 0.625           | 0.8000 |
| 0.9000                   | -0.087                   | 0.010           | 0.097           | -0.085          | 0.017           | 0.101           | -0.097          | 0.014           | 0.111           |                 |                 |                 | -0.066          | 0.019           | 0.084           | 0.020           | 0.017           | -0.003          | -0.658          | -0.067          | 0.591           | 0.9000 |
| 1.0000                   | -0.001                   | 0.023           | 0.023           | -0.008          | 0.036           | 0.044           | -0.019          | 0.012           | 0.032           |                 |                 |                 | 0.029           | 0.023           | -0.005          | 0.021           | 0.021           |                 | -0.628          | -0.130          | 0.497           | 1.0000 |
| M = 0.696      α = 11.79 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -2.034                   | 0.232           | 2.267           | -1.483          | 0.111           | 1.593           | -1.414          | -0.011          | 1.404           |                 |                 |                 | -1.228          | -0.131          | 1.097           | -1.072          | -0.198          | 0.874           | -0.820          | 0.153           |                 | 0.0000 |
| 0.0125                   | -1.952                   | 0.330           | 2.283           | -1.508          | 0.230           | 1.738           | -1.404          | 0.155           | 1.559           | -1.306          | 0.090           | 1.396           | -1.233          | 0.057           | 1.290           | -1.069          | 0.005           | 1.074           | -0.816          |                 |                 | 0.0125 |
| 0.0250                   | -1.705                   | 0.384           | 2.088           | -1.554          | 0.303           | 1.857           | -1.404          | 0.258           | 1.661           | -1.306          | 0.235           | 1.541           | -1.238          | 0.184           | 1.423           |                 | 0.139           |                 | -0.812          |                 |                 | 0.0250 |
| 0.0420                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.715                   | 0.356           | 1.070           | -1.711          | 0.306           | 2.018           | -1.436          | 0.272           | 1.708           |                 | 0.274           |                 | -1.251          | 0.255           | 1.506           | -1.068          | 0.202           | 1.270           | -0.809          | 0.155           |                 | 0.0500 |
| 0.0640                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.615                   | 0.323           | 0.937           | -1.796          | 0.291           | 2.087           | -1.473          | 0.272           | 1.745           | -1.356          |                 |                 | -1.296          | 0.264           | 1.559           | -1.076          | 0.232           | 1.308           | -0.802          | 0.175           |                 | 0.0750 |
| 0.0810                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.579                   | 0.299           | 0.878           | -1.162          | 0.272           | 1.434           | -1.766          | 0.265           | 2.031           | -1.398          | 0.263           | 1.661           | -1.308          | 0.261           | 1.570           | -1.072          | 0.238           | 1.310           | -0.798          | 0.199           | 1.007           | 0.1000 |
| 0.1500                   | -0.541                   | 0.263           | 0.804           | -0.530          | 0.247           | 0.777           | -1.442          | 0.242           | 1.684           | -1.885          | 0.235           | 2.120           | -1.401          | 0.244           | 1.644           | -1.100          | 0.232           | 1.331           | -0.791          | 0.213           | 1.004           | 0.1500 |
| 0.2000                   | -0.473                   | 0.233           | 0.706           | -0.438          | 0.227           | 0.666           | -0.675          | 0.231           | 0.907           | -1.512          |                 |                 | -1.862          | 0.217           | 2.079           | -1.114          | 0.218           | 1.332           | -0.776          | 0.212           | 0.988           | 0.2000 |
| 0.3000                   | -0.426                   | 0.188           | 0.614           | -0.415          | 0.190           | 0.605           | -0.393          | 0.187           | 0.580           |                 |                 |                 | -1.123          | 0.189           | 1.311           | -1.088          | 0.188           | 1.276           | -0.750          | 0.184           | 0.934           | 0.3000 |
| 0.4000                   | -0.389                   | 0.153           | 0.542           | -0.384          | 0.161           | 0.545           | -0.368          | 0.158           | 0.526           |                 |                 |                 | -0.491          | 0.160           | 0.651           | -1.104          | 0.163           | 1.268           | -0.734          | 0.153           | 0.888           | 0.4000 |
| 0.5000                   | -0.352                   | 0.133           | 0.496           | -0.343          | 0.132           | 0.475           | -0.332          | 0.131           | 0.464           |                 |                 |                 | -0.310          | 0.138           | 0.449           | -1.467          | 0.143           | 1.610           | -0.702          | 0.123           | 0.825           | 0.5000 |
| 0.6000                   |                          | 0.107           |                 | -0.287          | 0.109           | 0.396           | -0.298          | 0.107           | 0.404           |                 |                 |                 | -0.245          | 0.110           | 0.355           | -1.415          | 0.113           | 1.528           | -0.616          | 0.080           | 0.696           | 0.6000 |
| 0.7000                   | -0.237                   |                 |                 | -0.238          | 0.086           | 0.324           | -0.240          | 0.088           | 0.327           |                 |                 |                 | -0.190          | 0.092           | 0.282           | -1.043          | 0.085           | 1.128           | -0.567          | 0.041           | 0.608           | 0.7000 |
| 0.8000                   | -0.178                   | 0.056           | 0.234           | -0.171          | 0.064           | 0.235           | -0.185          | 0.069           | 0.254           |                 |                 |                 | -0.148          | 0.066           | 0.214           | -0.660          | 0.053           | 0.713           | -0.532          | -0.006          | 0.527           | 0.8000 |
| 0.9000                   | -0.101                   | 0.043           | 0.145           | -0.097          | 0.053           | 0.150           | -0.096          | 0.057           | 0.152           |                 |                 |                 | -0.054          | 0.051           | 0.106           | -0.340          | 0.016           | 0.355           | -0.491          | -0.069          | 0.422           | 0.9000 |
| 1.0000                   | -0.008                   | 0.039           | 0.046           | -0.016          | 0.054           | 0.071           | -0.028          | 0.051           | 0.023           |                 |                 |                 | 0.090           | 0.049           | -0.042          | -0.083          | -0.027          | 0.056           | -0.442          | -0.148          | 0.294           | 1.0000 |
| M = 0.699      α = 15.67 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.742                   | 0.180           | 1.922           | -1.695          | -0.015          | 1.680           | -1.748          | -0.351          | 1.397           |                 |                 |                 | -1.522          | -0.297          | 1.225           | -1.324          | -0.425          | 0.899           | -0.948          | -0.221          |                 | 0.0000 |
| 0.0125                   | -2.063                   | 0.359           | 2.421           | -1.777          | 0.196           | 1.973           | -1.749          | 0.025           | 1.774           | -1.607          | -0.025          | 1.582           | -1.522          | -0.002          | 1.520           | -1.322          | -0.143          | 1.178           | -0.941          |                 |                 | 0.0125 |
| 0.0250                   | -2.228                   | 0.465           | 2.694           | -1.846          | 0.332           | 2.177           | -1.747          | 0.263           | 2.010           | -1.605          | 0.213           | 1.818           | -1.523          | 0.191           | 1.713           |                 | 0.049           |                 | -0.933          |                 |                 | 0.0250 |
| 0.0420                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -2.096                   | 0.461           | 2.557           | -1.943          | 0.375           | 2.318           | -1.732          | 0.328           | 2.060           |                 | 0.273           |                 | -1.527          | 0.267           | 1.794           | -1.315          | 0.167           | 1.481           | -0.919          | 0.090           |                 | 0.0500 |
| 0.0640                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -1.181                   | 0.431           | 1.612           | -1.806          | 0.374           | 2.179           | -1.738          | 0.338           | 2.076           | -1.679          |                 |                 | -1.613          | 0.307           | 1.920           | -1.308          | 0.229           | 1.537           | -0.906          | 0.159           |                 | 0.0750 |
| 0.0810                   |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.885                   | 0.406           | 1.291           | -1.970          | 0.361           | 2.331           | -1.751          | 0.341           | 2.092           | -1.686          | 0.322           | 2.008           | -1.701          | 0.304           | 2.005           | -1.300          | 0.249           | 1.549           | -0.892          | 0.194           | 1.086           | 0.1000 |
| 0.1500                   | -0.781                   | 0.358           | 1.139           | -1.389          | 0.339           | 1.728           | -2.102          | 0.321           | 2.423           | -1.733          | 0.316           | 2.049           | -1.670          | 0.299           | 1.969           | -1.310          | 0.270           | 1.579           | -0.874          | 0.213           | 1.086           | 0.1500 |
| 0.2000                   | -0.676                   | 0.319           | 0.995           | -0.913          | 0.319           | 1.232           | -1.671          | 0.310           | 1.981           | -2.052          |                 |                 | -1.631          | 0.287           | 1.918           | -1.354          | 0.265           | 1.619           | -0.854          | 0.220           | 1.074           | 0.2000 |
| 0.3000                   | -0.604                   | 0.261           | 0.865           | -0.630          | 0.275           | 0.905           | -0.842          | 0.279           | 1.121           |                 |                 |                 | -1.923          | 0.262           | 2.186           | -1.326          | 0.234           | 1.560           | -0.814          | 0.220           | 1.034           | 0.3000 |
| 0.4000                   | -0.544                   | 0.221           | 0.764           | -0.546          | 0.241           | 0.786           | -0.589          | 0.239           | 0.828           |                 |                 |                 | -1.274          | 0.230           | 1.504           | -1.225          | 0.210           | 1.435           | -0.784          | 0.177           | 0.960           | 0.4000 |
| 0.5000                   | -0.481                   | 0.198           | 0.679           | -0.485          | 0.204           | 0.689           | -0.494          | 0.198           | 0.692           |                 |                 |                 | -0.801          | 0.198           | 0.999           | -1.153          | 0.180           | 1.333           | -0.739          | 0.177           | 0.960           | 0.5000 |
| 0.6000                   |                          | 0.164           |                 | -0.412          | 0.173           | 0.585           | -0.434          | 0.169           | 0.603           |                 |                 |                 | -0.542          | 0.164           | 0.706           | -1.132          | 0.147           | 1.280           | -0.682          | 0.094           | 0.776           | 0.6000 |
| 0.7000                   | -0.312                   |                 |                 | -0.329          | 0.138           | 0.466           | -0.359          | 0.136           | 0.495           |                 |                 |                 | -0.376          | 0.132           | 0.508           | -1.526          | 0.107           | 1.633           | -0.633          | 0.048           | 0.681           | 0.7000 |
| 0.8000                   | -0.230                   | 0.092           | 0.321           | -0.237          | 0.104           | 0.341           | -0.259          | 0.095           | 0.354           |                 |                 |                 | -0.265          | 0.097           | 0.362           | -1.415          | 0.059           | 1.475           | -0.577          | -0.012          | 0.565           | 0.8000 |
| 0.9000                   | -0.138                   | 0.062           | 0.201           | -0.136          | 0.077           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(d) BW - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.903      α = 03.78  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.271          | 0.229           | 0.500           | -0.359          | 0.213           | 0.572           | -0.453          | 0.181           | 0.634           | -0.707          | 0.155           | 0.863           | -0.620          | -0.028          | 0.592           | -0.666          | -0.060          | 0.606           | -0.635          | 0.144           |                 | 0.0000 |
| 0.0125                    | -0.276          | 0.181           | 0.457           | -0.469          | 0.160           | 0.629           | -0.579          | 0.155           | 0.735           | -0.670          | 0.082           | 0.752           | -0.670          | 0.082           | 0.752           | -0.667          | 0.075           | 0.742           | -0.637          |                 |                 | 0.0125 |
| 0.0250                    | -0.272          | 0.142           | 0.415           | -0.490          | 0.119           | 0.609           | -0.598          | 0.130           | 0.729           | -0.693          | 0.115           | 0.808           | -0.677          | 0.138           | 0.815           |                 | 0.148           |                 | -0.639          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.237          | 0.091           | 0.329           | -0.264          | 0.076           | 0.340           | -0.313          | 0.084           | 0.397           |                 | 0.068           |                 | -0.562          | 0.089           | 0.651           | -0.671          | 0.103           | 0.774           | -0.641          | 0.139           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.201          | 0.064           | 0.265           | -0.243          | 0.051           | 0.294           | -0.301          | 0.055           | 0.356           | -0.316          |                 |                 | -0.377          | 0.064           | 0.441           | -0.674          | 0.079           | 0.753           | -0.641          | 0.127           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.201          | 0.048           | 0.250           | -0.248          | 0.032           | 0.281           | -0.278          | 0.040           | 0.318           | -0.310          | 0.036           | 0.346           | -0.333          | 0.042           | 0.375           | -0.685          | 0.057           | 0.742           | -0.641          | 0.098           | 0.739           | 0.1000 |
| 0.1500                    | -0.220          | 0.028           | 0.248           | -0.229          | 0.015           | 0.244           | -0.260          | 0.015           | 0.275           | -0.269          | 0.016           | 0.284           | -0.305          | 0.027           | 0.332           | -0.694          | 0.037           | 0.731           | -0.642          | 0.081           |                 | 0.1500 |
| 0.2000                    | -0.195          | 0.010           | 0.205           | -0.233          | 0.008           | 0.241           | -0.242          | 0.017           | 0.259           | -0.275          |                 |                 | -0.285          | 0.014           | 0.299           | -0.698          | 0.019           | 0.717           | -0.641          | 0.060           | 0.700           | 0.2000 |
| 0.3000                    | -0.218          | -0.015          | 0.203           | -0.236          | -0.016          | 0.220           | -0.255          | -0.007          | 0.248           | -0.272          | -0.004          | 0.268           | -0.272          | -0.004          | 0.268           | -0.553          | -0.003          | 0.550           | -0.644          | 0.037           | 0.681           | 0.3000 |
| 0.4000                    | -0.236          | -0.036          | 0.200           | -0.238          | -0.031          | 0.207           | -0.246          | -0.026          | 0.220           | -0.260          | -0.017          | 0.243           | -0.260          | -0.017          | 0.243           | -0.207          | -0.015          | 0.192           | -0.659          | 0.023           | 0.683           | 0.4000 |
| 0.5000                    | -0.238          | -0.040          | 0.198           | -0.236          | -0.044          | 0.192           | -0.242          | -0.036          | 0.205           | -0.250          | -0.030          | 0.220           | -0.250          | -0.030          | 0.220           | -0.216          | -0.016          | 0.200           | -0.666          | 0.014           | 0.680           | 0.5000 |
| 0.6000                    |                 | -0.048          |                 | -0.224          | -0.049          | 0.175           | -0.228          | -0.041          | 0.187           | -0.241          | -0.032          | 0.209           | -0.241          | -0.032          | 0.209           | -0.216          | -0.026          | 0.190           | -0.647          | 0.009           | 0.656           | 0.6000 |
| 0.7000                    | -0.219          |                 |                 | -0.221          | -0.048          | 0.173           | -0.218          | -0.041          | 0.177           | -0.219          | -0.037          | 0.182           | -0.219          | -0.037          | 0.182           | -0.176          | -0.023          | 0.152           | -0.614          | 0.005           | 0.619           | 0.7000 |
| 0.8000                    | -0.172          | -0.047          | 0.124           | -0.164          | -0.041          | 0.123           | -0.161          | -0.040          | 0.121           | -0.175          | -0.031          | 0.144           | -0.175          | -0.031          | 0.144           | -0.103          | -0.016          | 0.087           | -0.520          | 0.002           | 0.522           | 0.8000 |
| 0.9000                    | -0.083          | -0.019          | 0.064           | -0.074          | -0.011          | 0.063           | -0.069          | -0.022          | 0.047           | -0.066          | 0.001           | 0.067           | -0.066          | 0.001           | 0.067           | -0.058          | 0.005           | 0.063           | -0.315          | 0.006           | 0.321           | 0.9000 |
| 1.0000                    | 0.046           | 0.027           | -0.020          | 0.049           | 0.043           | -0.007          | 0.056           | 0.013           | -0.043          | 0.108           | 0.060           | -0.047          | 0.108           | 0.060           | -0.047          | -0.040          | 0.042           | 0.082           | -0.001          | 0.015           | 0.017           | 1.0000 |
| M = 0.957      α = 03.88  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.205          | 0.245           | 0.450           | -0.377          | 0.215           | 0.592           | -0.411          | 0.212           | 0.623           | -0.630          | 0.150           | 0.779           | -0.630          | 0.150           | 0.779           | -0.661          | 0.155           | 0.816           | -0.665          | 0.150           |                 | 0.0000 |
| 0.0125                    | -0.240          | 0.192           | 0.432           | -0.437          | 0.163           | 0.600           | -0.537          | 0.157           | 0.693           | -0.645          | 0.153           | 0.802           | -0.648          | 0.144           | 0.791           | -0.662          | 0.136           | 0.798           | -0.672          |                 |                 | 0.0125 |
| 0.0250                    | -0.255          | 0.150           | 0.405           | -0.436          | 0.123           | 0.559           | -0.556          | 0.115           | 0.672           | -0.678          | 0.117           | 0.791           | -0.646          | 0.127           | 0.773           |                 | 0.117           |                 | -0.677          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.224          | 0.099           | 0.323           | -0.250          | 0.078           | 0.327           | -0.277          | 0.077           | 0.354           |                 | 0.065           |                 | -0.583          | 0.064           | 0.647           | -0.668          | 0.077           | 0.745           | -0.680          | 0.100           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.187          | 0.068           | 0.256           | -0.228          | 0.054           | 0.282           | -0.275          | 0.050           | 0.324           | -0.307          |                 |                 | -0.378          | 0.048           | 0.426           | -0.677          | 0.047           | 0.724           | -0.684          | 0.066           | 0.741           | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.200          | 0.051           | 0.251           | -0.219          | 0.033           | 0.252           | -0.280          | 0.029           | 0.310           | -0.296          | 0.021           | 0.317           | -0.332          | 0.028           | 0.361           | -0.686          | 0.027           | 0.714           | -0.686          | 0.055           | 0.741           | 0.1000 |
| 0.1500                    | -0.198          | 0.028           | 0.226           | -0.231          | 0.011           | 0.242           | -0.261          | 0.011           | 0.272           | -0.279          | -0.002          | 0.277           | -0.300          | 0.001           | 0.302           | -0.691          | 0.004           | 0.695           | -0.686          | 0.037           | 0.723           | 0.1500 |
| 0.2000                    | -0.198          | 0.009           | 0.206           | -0.231          | 0.001           | 0.232           | -0.247          | 0.004           | 0.250           | -0.275          |                 |                 | -0.288          | -0.014          | 0.278           | -0.655          | -0.013          | 0.642           | -0.689          | 0.018           | 0.707           | 0.2000 |
| 0.3000                    | -0.217          | -0.023          | 0.194           | -0.242          | -0.027          | 0.216           | -0.254          | -0.023          | 0.232           | -0.282          | -0.022          | 0.260           | -0.282          | -0.022          | 0.260           | -0.462          | -0.037          | 0.425           | -0.699          | -0.011          | 0.688           | 0.3000 |
| 0.4000                    | -0.248          | -0.051          | 0.197           | -0.246          | -0.047          | 0.199           | -0.262          | -0.044          | 0.218           | -0.279          | -0.043          | 0.235           | -0.279          | -0.043          | 0.235           | -0.254          | -0.051          | 0.203           | -0.730          | -0.028          | 0.702           | 0.4000 |
| 0.5000                    | -0.254          | -0.059          | 0.195           | -0.257          | -0.068          | 0.189           | -0.264          | -0.053          | 0.211           | -0.280          | -0.061          | 0.219           | -0.280          | -0.061          | 0.219           | -0.269          | -0.049          | 0.220           | -0.747          | -0.028          | 0.719           | 0.5000 |
| 0.6000                    |                 | -0.073          |                 | -0.263          | -0.076          | 0.187           | -0.268          | -0.068          | 0.200           | -0.273          | -0.065          | 0.238           | -0.273          | -0.065          | 0.238           | -0.277          | -0.068          | 0.208           | -0.755          | -0.027          | 0.728           | 0.6000 |
| 0.7000                    | -0.267          |                 |                 | -0.274          | -0.079          | 0.195           | -0.276          | -0.074          | 0.202           | -0.278          | -0.076          | 0.202           | -0.278          | -0.076          | 0.202           | -0.294          | -0.062          | 0.232           | -0.748          | -0.020          | 0.728           | 0.7000 |
| 0.8000                    | -0.280          | -0.086          | 0.195           | -0.282          | -0.082          | 0.200           | -0.284          | -0.078          | 0.205           | -0.284          | -0.075          | 0.209           | -0.284          | -0.075          | 0.209           | -0.307          | -0.046          | 0.262           | -0.672          | -0.014          | 0.659           | 0.8000 |
| 0.9000                    | -0.243          | -0.043          | 0.200           | -0.243          | -0.036          | 0.207           | -0.256          | -0.046          | 0.209           | -0.244          | -0.021          | 0.223           | -0.244          | -0.021          | 0.223           | -0.237          | -0.009          | 0.228           | -0.506          | 0.009           | 0.515           | 0.9000 |
| 1.0000                    | -0.155          | 0.032           | 0.187           | -0.159          | 0.057           | 0.216           | -0.192          | 0.022           | 0.214           | -0.159          | 0.085           | 0.244           | -0.159          | 0.085           | 0.244           | -0.082          | 0.049           | 0.131           | -0.250          | 0.047           | 0.297           | 1.0000 |
| M = 1.008      α = -00.05 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.086           | 0.090           | 0.004           | -0.015          | 0.039           | 0.054           | -0.035          | -0.014          | 0.021           | -0.183          | -0.115          | 0.067           | -0.121          | -0.115          | 0.067           | -0.121          | 0.026           | 0.147           | -0.311          | -0.051          |                 | 0.0000 |
| 0.0125                    | 0.007           | 0.050           | 0.043           | -0.043          | 0.012           | 0.055           | -0.047          | 0.005           | 0.052           | -0.074          | -0.031          | 0.074           | -0.124          | -0.046          | 0.078           | -0.122          | -0.018          | 0.105           | -0.269          |                 |                 | 0.0125 |
| 0.0250                    | -0.042          | 0.020           | 0.062           | -0.059          | -0.009          | 0.051           | -0.058          | 0.010           | 0.068           | -0.091          | -0.031          | 0.060           | -0.091          | -0.011          | 0.080           |                 | -0.049          |                 | -0.244          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.052          | -0.011          | 0.042           | -0.061          | -0.031          | 0.030           | -0.076          | -0.025          | 0.051           |                 | -0.057          |                 | -0.103          | -0.047          | 0.056           | -0.133          | -0.077          | 0.056           | -0.244          | -0.127          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.046          | -0.026          | 0.021           | -0.066          | -0.035          | 0.032           | -0.083          | -0.041          | 0.042           | -0.099          |                 |                 | -0.110          | -0.058          | 0.052           | -0.145          | -0.083          | 0.061           | -0.242          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.060          | -0.031          | 0.028           | -0.071          | -0.049          | 0.022           | -0.093          | -0.057          | 0.036           | -0.109          | -0.069          | 0.041           | -0.110          | -0.068          | 0.042           | -0.144          | -0.090          | 0.055           | -0.240          | -0.137          | 0.102           | 0.1000 |
| 0.1500                    | -0.066          | -0.038          | 0.028           | -0.085          | -0.061          | 0.024           | -0.092          | -0.063          | 0.029           | -0.103          | -0.084          | 0.019           | -0.113          | -0.079          | 0.034           | -0.144          | -0.096          | 0.048           | -0.234          | -0.144          | 0.090           | 0.1500 |
| 0.2000                    | -0.070          | -0.053          | 0.017           | -0.087          | -0.060          | 0.027           | -0.083          | -0.066          | 0.016           | -0.108          |                 |                 | -0.112          | -0.084          | 0.027           | -0.147          | -0.100          | 0.047           | -0.227          | -0.155          | 0.072           | 0.2000 |
| 0.3000                    | -0.083          | -0.075          | 0.008           | -0.098          | -0.080          | 0.018           | -0.102          | -0.081          | 0.021           | -0.110          | -0.088          | 0.023           | -0.110          | -0.088          | 0.023           | -0.154          | -0.120          | 0.035           | -0.216          | -0.168          | 0.048           | 0.3000 |
| 0.4000                    | -0.105          | -0.093          | 0.012           | -0.103          | -0.090          | 0.013           | -0.106          | -0.089          | 0.018           | -0.110          | -0.088          | 0.022           | -0.121          | -0.088          | 0.022           | -0.164          | -0.131          | 0.039           | -0.225          | -0.179          | 0.047           | 0.4000 |
| 0.5000                    | -0.110          | -0.094          | 0.020           | -0.109          | -0.094          | 0.015           | -0.110          | -0.094          | 0.016           | -0.121          | -0.091          | 0.030           | -0.121          | -0.091          | 0.030           | -0.171          | -0.141          | 0.029           | -0.223          | -0.184          | 0.039           | 0.5000 |
| 0.6000                    |                 | -0.094          |                 | -0.125          | -0.099          | 0.025           | -0.128          | -0.094          | 0.034           | -0.133          | -0.108          | 0.025           | -0.133          | -0.108          | 0.025           | -0.179          | -0.158          | 0.021           | -0.229          | -0.192          | 0.038           | 0.6000 |
| 0.7000                    | -0.143          |                 |                 | -0.152          | -0.121          | 0.032           | -0.151          | -0.116          | 0.035           | -0.157          | -0.117          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(d) BW - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.002      α = 03.88 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.155          | 0.265           | 0.420           | -0.320          | 0.237           | 0.557           | -0.365          | 0.252           | 0.616           |                 |                 |                 | -0.537          | 0.235           | 0.772           | -0.585          | 0.184           | 0.769           | -0.626          | 0.144           |                 | 0.0000 |
| 0.0125                   | -0.195          | 0.212           | 0.407           | -0.378          | 0.190           | 0.568           | -0.458          | 0.195           | 0.654           | -0.560          | 0.195           | 0.755           | -0.558          | 0.192           | 0.750           | -0.584          | 0.161           | 0.745           | -0.635          |                 |                 | 0.0125 |
| 0.0250                   | -0.213          | 0.170           | 0.384           | -0.376          | 0.154           | 0.530           | -0.465          | 0.154           | 0.619           | -0.587          | 0.153           | 0.740           | -0.558          | 0.161           | 0.718           | -0.558          | 0.161           | 0.745           | -0.641          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.187          | 0.123           | 0.310           | -0.189          | 0.113           | 0.303           | -0.219          | 0.116           | 0.335           |                 |                 | 0.109           | -0.489          | 0.135           | 0.624           | -0.591          | 0.100           | 0.691           | -0.645          | 0.095           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.149          | 0.098           | 0.246           | -0.180          | 0.091           | 0.271           | -0.208          | 0.088           | 0.296           | -0.246          |                 |                 | -0.299          | 0.110           | 0.408           | -0.603          | 0.070           | 0.673           | -0.650          | 0.074           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.144          | 0.084           | 0.228           | -0.167          | 0.071           | 0.238           | -0.216          | 0.075           | 0.291           | -0.230          | 0.067           | 0.297           | -0.257          | 0.082           | 0.339           | -0.607          | 0.046           | 0.653           | -0.653          | 0.049           | 0.702           | 0.1000 |
| 0.1500                   | -0.145          | 0.068           | 0.214           | -0.177          | 0.054           | 0.232           | -0.190          | 0.054           | 0.244           | -0.216          | 0.042           | 0.257           | -0.229          | 0.057           | 0.286           | -0.601          | 0.019           | 0.620           | -0.653          | 0.029           | 0.682           | 0.1500 |
| 0.2000                   | -0.149          | 0.050           | 0.199           | -0.167          | 0.045           | 0.212           | -0.181          | 0.051           | 0.232           | -0.208          |                 |                 | -0.222          | 0.034           | 0.256           | -0.559          | 0.002           | 0.561           | -0.655          | 0.010           | 0.664           | 0.2000 |
| 0.3000                   | -0.156          | 0.022           | 0.178           | -0.179          | 0.016           | 0.195           | -0.188          | 0.015           | 0.203           |                 |                 |                 | -0.223          | 0.008           | 0.231           | -0.386          | -0.029          | 0.357           | -0.662          | -0.021          | 0.642           | 0.3000 |
| 0.4000                   | -0.186          | -0.011          | 0.175           | -0.186          | -0.013          | 0.174           | -0.199          | -0.015          | 0.187           |                 |                 |                 | -0.229          | -0.019          | 0.210           | -0.254          | -0.050          | 0.203           | -0.666          | -0.047          | 0.639           | 0.4000 |
| 0.5000                   | -0.204          | -0.027          | 0.178           | -0.209          | -0.040          | 0.170           | -0.216          | -0.040          | 0.176           |                 |                 |                 | -0.248          | -0.042          | 0.207           | -0.267          | -0.054          | 0.213           | -0.697          | -0.073          | 0.623           | 0.5000 |
| 0.6000                   |                 | -0.056          |                 | -0.234          | -0.064          | 0.171           | -0.237          | -0.060          | 0.177           |                 |                 |                 | -0.255          | -0.053          | 0.203           | -0.272          | -0.068          | 0.205           | -0.695          | -0.079          | 0.607           | 0.6000 |
| 0.7000                   | -0.249          |                 |                 | -0.259          | -0.076          | 0.183           | -0.261          | -0.070          | 0.191           |                 |                 |                 | -0.267          | -0.076          | 0.192           | -0.286          | -0.088          | 0.198           | -0.686          | -0.081          | 0.636           | 0.7000 |
| 0.8000                   | -0.280          | -0.097          | 0.183           | -0.281          | -0.094          | 0.186           | -0.283          | -0.091          | 0.192           |                 |                 |                 | -0.287          | -0.088          | 0.199           | -0.308          | -0.107          | 0.201           | -0.639          | -0.093          | 0.545           | 0.8000 |
| 0.9000                   | -0.289          | -0.106          | 0.184           | -0.286          | -0.101          | 0.185           | -0.289          | -0.106          | 0.183           |                 |                 |                 | -0.296          | -0.096          | 0.200           | -0.306          | -0.110          | 0.195           | -0.572          | -0.087          | 0.485           | 0.9000 |
| 1.0000                   | -0.278          | -0.108          | 0.170           | -0.277          | -0.096          | 0.180           | -0.281          | -0.116          | 0.165           |                 |                 |                 | -0.295          | -0.101          | 0.194           | -0.279          | -0.098          | 0.181           | -0.485          | -0.059          | 0.426           | 1.0000 |
| M = 1.062      α = 03.93 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.078          | 0.326           | 0.404           | -0.271          | 0.282           | 0.553           | -0.316          | 0.286           | 0.602           |                 |                 |                 | -0.482          | 0.280           | 0.762           | -0.534          | 0.210           | 0.745           | -0.542          | 0.217           |                 | 0.0000 |
| 0.0125                   | -0.116          | 0.271           | 0.387           | -0.322          | 0.231           | 0.553           | -0.412          | 0.225           | 0.637           | -0.516          | 0.218           | 0.734           | -0.501          | 0.213           | 0.714           | -0.534          | 0.185           | 0.719           | -0.546          |                 |                 | 0.0125 |
| 0.0250                   | -0.138          | 0.228           | 0.366           | -0.318          | 0.192           | 0.510           | -0.424          | 0.182           | 0.606           | -0.536          | 0.175           | 0.711           | -0.507          | 0.166           | 0.673           | -0.534          | 0.162           |                 | -0.548          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.134          | 0.174           | 0.308           | -0.145          | 0.148           | 0.293           | -0.193          | 0.147           | 0.340           |                 |                 | 0.132           | -0.474          | 0.133           | 0.607           | -0.539          | 0.124           | 0.663           | -0.551          | 0.129           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.108          | 0.142           | 0.251           | -0.143          | 0.127           | 0.269           | -0.180          | 0.119           | 0.299           | -0.220          |                 |                 | -0.291          | 0.105           | 0.396           | -0.549          | 0.096           | 0.645           | -0.555          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.109          | 0.123           | 0.232           | -0.139          | 0.104           | 0.244           | -0.185          | 0.098           | 0.284           | -0.214          | 0.089           | 0.303           | -0.242          | 0.089           | 0.331           | -0.547          | 0.076           | 0.624           | -0.559          | 0.116           |                 | 0.1000 |
| 0.1500                   | -0.110          | 0.101           | 0.211           | -0.151          | 0.079           | 0.231           | -0.169          | 0.073           | 0.243           | -0.196          | 0.058           | 0.255           | -0.217          | 0.058           | 0.275           | -0.525          | 0.052           | 0.577           | -0.559          | 0.106           | 0.665           | 0.1500 |
| 0.2000                   | -0.130          | 0.076           | 0.206           | -0.138          | 0.070           | 0.208           | -0.168          | 0.066           | 0.234           | -0.183          |                 |                 | -0.211          | 0.042           | 0.252           | -0.479          | 0.038           | 0.517           | -0.560          | 0.087           | 0.646           | 0.2000 |
| 0.3000                   | -0.134          | 0.038           | 0.172           | -0.162          | 0.031           | 0.193           | -0.176          | 0.023           | 0.199           |                 |                 |                 | -0.201          | 0.017           | 0.218           | -0.332          | 0.015           | 0.347           | -0.565          | 0.066           | 0.626           | 0.3000 |
| 0.4000                   | -0.165          | 0.165           | -0.168          | -0.001          | 0.167           | -0.175          | -0.004          | 0.171           |                 |                 |                 |                 | -0.196          | 0.004           | 0.200           | -0.203          | 0.004           | 0.207           | -0.586          | 0.013           | 0.599           | 0.4000 |
| 0.5000                   | -0.171          | -0.014          | 0.157           | -0.169          | -0.019          | 0.150           | -0.178          | -0.018          | 0.160           |                 |                 |                 | -0.192          | 0.003           | 0.189           | -0.192          | 0.010           | 0.202           | -0.595          | -0.004          | 0.591           | 0.5000 |
| 0.6000                   |                 | -0.020          |                 | -0.177          | -0.022          | 0.155           | -0.181          | -0.016          | 0.165           |                 |                 |                 | -0.187          | 0.006           | 0.181           | -0.195          | -0.010          | 0.185           | -0.591          | -0.019          | 0.572           | 0.6000 |
| 0.7000                   | -0.176          |                 |                 | -0.182          | -0.016          | 0.166           | -0.183          | -0.014          | 0.169           |                 |                 |                 | -0.184          | 0.018           | 0.166           | -0.198          | 0.025           | 0.173           | -0.581          | -0.023          | 0.559           | 0.7000 |
| 0.8000                   | -0.191          | -0.034          | 0.158           | -0.191          | -0.030          | 0.161           | -0.196          | -0.026          | 0.170           |                 |                 |                 | -0.191          | 0.028           | 0.162           | -0.217          | -0.041          | 0.176           | -0.539          | -0.030          | 0.509           | 0.8000 |
| 0.9000                   | -0.192          | -0.037          | 0.155           | -0.190          | -0.034          | 0.157           | -0.195          | -0.037          | 0.158           |                 |                 |                 | -0.197          | 0.034           | 0.163           | -0.215          | -0.047          | 0.168           | -0.479          | -0.026          | 0.453           | 0.9000 |
| 1.0000                   | -0.180          | -0.038          | 0.142           | -0.179          | -0.027          | 0.152           | -0.179          | -0.046          | 0.133           |                 |                 |                 | -0.202          | 0.034           | 0.168           | -0.192          | -0.042          | 0.150           | -0.401          | -0.011          | 0.390           | 1.0000 |
| M = 1.109      α = 03.93 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.110          | 0.284           | 0.394           | -0.235          | 0.265           | 0.500           | -0.261          | 0.281           | 0.543           |                 |                 |                 | -0.348          | 0.337           | 0.685           | -0.490          | 0.260           | 0.749           | -0.516          | 0.250           |                 | 0.0000 |
| 0.0125                   | -0.118          | 0.235           | 0.352           | -0.243          | 0.220           | 0.464           | -0.300          | 0.255           | 0.554           | -0.357          | 0.290           | 0.646           | -0.389          | 0.289           | 0.678           | -0.489          | 0.234           | 0.723           | -0.520          |                 |                 | 0.0125 |
| 0.0250                   | -0.120          | 0.196           | 0.316           | -0.221          | 0.187           | 0.408           | -0.285          | 0.232           | 0.517           | -0.363          | 0.246           | 0.609           | -0.398          | 0.252           | 0.650           |                 | 0.211           |                 | -0.523          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.107          | 0.152           | 0.259           | -0.083          | 0.156           | 0.239           | -0.098          | 0.199           | 0.297           |                 |                 | 0.209           | -0.319          | 0.213           | 0.532           | -0.495          | 0.173           | 0.668           | -0.528          | 0.187           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.070          | 0.127           | 0.197           | -0.069          | 0.154           | 0.223           | -0.084          | 0.180           | 0.264           | -0.130          |                 |                 | -0.158          | 0.192           | 0.351           | -0.505          | 0.147           | 0.652           | -0.533          | 0.163           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.056          | 0.123           | 0.179           | -0.061          | 0.147           | 0.208           | -0.086          | 0.174           | 0.260           | -0.123          | 0.174           | 0.296           | -0.152          | 0.168           | 0.320           | -0.500          | 0.128           | 0.629           | -0.537          | 0.139           | 0.676           | 0.1000 |
| 0.1500                   | -0.034          | 0.140           | 0.174           | -0.060          | 0.153           | 0.212           | -0.069          | 0.166           | 0.236           | -0.110          | 0.148           | 0.259           | -0.141          | 0.142           | 0.283           | -0.463          | 0.105           | 0.567           | -0.538          | 0.119           | 0.657           | 0.1500 |
| 0.2000                   | -0.054          | 0.148           | 0.202           | -0.042          | 0.166           | 0.208           | -0.077          | 0.161           | 0.238           | -0.103          |                 |                 | -0.132          | 0.113           | 0.245           | -0.400          | 0.093           | 0.493           | -0.540          | 0.098           | 0.638           | 0.2000 |
| 0.3000                   | -0.045          | 0.137           | 0.182           | -0.079          | 0.120           | 0.199           | -0.097          | 0.112           | 0.209           |                 |                 |                 | -0.142          | 0.080           | 0.222           | -0.234          | 0.071           | 0.304           | -0.545          | 0.068           | 0.613           | 0.3000 |
| 0.4000                   | -0.091          | 0.080           | 0.171           | -0.104          | 0.072           | 0.175           | -0.118          | 0.069           | 0.187           |                 |                 |                 | -0.152          | 0.065           | 0.217           | -0.168          | 0.054           | 0.222           | -0.562          | 0.045           | 0.607           | 0.4000 |
| 0.5000                   | -0.126          | 0.053           | 0.178           | -0.127          | 0.044           | 0.187           | -0.151          | 0.045           | 0.187           |                 |                 |                 | -0.162          | 0.057           | 0.219           | -0.178          | 0.049           | 0.227           | -0.567          | 0.029           | 0.596           | 0.5000 |
| 0.6000                   |                 | 0.042           |                 | -0.149          | 0.038           | 0.186           | -0.169          | 0.004           | 0.194           |                 |                 |                 | -0.162          | 0.045           | 0.208           | -0.180          | 0.024           | 0.204           | -0.561          | 0.013           | 0.574           | 0.6000 |
| 0.7000                   | -0.151          |                 |                 | -0.159          | 0.027           | 0.186           | -0.168          | 0.031           | 0.189           |                 |                 |                 | -0.157          | 0.024           | 0.182           | -0.183          | 0.000           | 0.183           | -0.545          | 0.010           | 0.555           | 0.7000 |
| 0.8000                   | -0.170          | -0.002          | 0.168           | -0.170          | -0.001          | 0.186           | -0.169          | 0.004           | 0.194           |                 |                 |                 | -0.171          | -0.002          | 0.169           | -0.196          | -0.022          | 0.173           | -0.491          | -0.003          | 0.499           | 0.8000 |
| 0.9000                   | -0.175          | -0.029          | 0.146           | -0.175          | -0.027          | 0.148           | -0.179          | -0.024          | 0.155           |                 |                 |                 | -               |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(d) BW - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.299      α = -04.18 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.329           | -0.182          | -0.511          | 0.234           | -0.235          | -0.469          | 0.224           | -0.269          | -0.493          | 0.244           | -0.339          | -0.583          | 0.245           | -0.413          | -0.657          | 0.239           | -0.453          |                 | 0.0000          |                 |                 | 0.0000 |
| 0.0125                    | 0.221           | -0.137          | -0.357          | 0.179           | -0.215          | -0.395          | 0.179           | -0.276          | -0.455          | 0.187           | -0.322          | -0.509          | 0.197           | -0.340          | -0.537          | 0.208           | -0.407          | -0.615          | 0.204           | -0.454          |                 | 0.0125 |
| 0.0250                    | 0.147           | -0.107          | -0.254          | 0.141           | -0.196          | -0.337          | 0.145           | -0.272          | -0.417          | 0.155           | -0.310          | -0.465          | 0.160           | -0.337          | -0.497          |                 | -0.405          |                 | 0.176           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.104           | -0.094          | -0.178          | 0.115           | -0.157          | -0.272          | 0.106           | -0.235          | -0.342          |                 | -0.251          |                 | 0.116           | -0.326          | -0.442          | 0.133           | -0.407          | -0.541          | 0.139           | -0.453          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.096           | -0.100          | -0.196          | 0.086           | -0.117          | -0.204          | 0.090           | -0.117          | -0.207          | 0.062           |                 |                 | 0.104           | -0.177          | -0.281          | 0.113           | -0.410          | -0.523          | 0.116           | -0.452          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.079           | -0.089          | -0.167          | 0.070           | -0.111          | -0.181          | 0.083           | -0.121          | -0.204          | 0.074           | -0.154          | -0.228          | 0.081           | -0.137          | -0.218          | 0.090           | -0.399          | -0.488          | 0.105           | -0.457          | -0.562          | 0.1000 |
| 0.1500                    | 0.060           | -0.087          | -0.146          | 0.051           | -0.095          | -0.146          | 0.067           | -0.125          | -0.192          | 0.061           | -0.124          | -0.186          | 0.073           | -0.123          | -0.196          | 0.066           | -0.303          | -0.369          | 0.088           | -0.460          | -0.548          | 0.1500 |
| 0.2000                    | 0.039           | -0.082          | -0.121          | 0.066           | -0.088          | -0.154          | 0.057           | -0.069          | -0.126          | 0.061           |                 |                 | 0.067           | -0.138          | -0.205          | 0.063           | -0.254          | -0.318          | 0.073           | -0.461          | -0.534          | 0.2000 |
| 0.3000                    | 0.052           | -0.089          | -0.141          | 0.044           | -0.084          | -0.128          | 0.047           | -0.111          | -0.158          |                 |                 |                 | 0.032           | -0.129          | -0.160          | 0.039           | -0.187          | -0.226          | 0.044           | -0.408          | -0.453          | 0.3000 |
| 0.4000                    | 0.036           | -0.101          | -0.137          | 0.036           | -0.106          | -0.142          | 0.037           | -0.110          | -0.147          |                 |                 |                 | 0.032           | -0.129          | -0.160          | 0.039           | -0.187          | -0.226          | 0.044           | -0.408          | -0.453          | 0.4000 |
| 0.5000                    | 0.019           | -0.107          | -0.126          | 0.020           | -0.119          | -0.139          | 0.018           | -0.114          | -0.132          |                 |                 |                 | 0.024           | -0.127          | -0.151          | 0.021           | -0.173          | -0.194          | 0.029           | -0.374          | -0.403          | 0.5000 |
| 0.6000                    |                 | -0.120          |                 | 0.017           | -0.122          | -0.139          | 0.016           | -0.131          | -0.147          |                 |                 |                 | 0.020           | -0.140          | -0.160          | 0.020           | -0.168          | -0.188          | 0.020           | -0.335          | -0.354          | 0.6000 |
| 0.7000                    | 0.004           |                 |                 | 0.001           | -0.130          | -0.131          | 0.013           | -0.124          | -0.136          |                 |                 |                 | 0.021           | -0.135          | -0.156          | 0.023           | -0.173          | -0.196          | 0.015           | -0.286          | -0.301          | 0.7000 |
| 0.8000                    | -0.015          | -0.141          | -0.126          | -0.014          | -0.139          | -0.125          | -0.006          | -0.138          | -0.131          |                 |                 |                 | 0.009           | -0.137          | -0.147          | 0.005           | -0.167          | -0.172          | 0.011           | -0.238          | -0.250          | 0.8000 |
| 0.9000                    | -0.022          | -0.114          | -0.093          | -0.016          | -0.117          | -0.101          | -0.023          | -0.128          | -0.105          |                 |                 |                 | -0.004          | -0.134          | -0.130          | 0.002           | -0.161          | -0.164          | 0.004           | -0.199          | -0.204          | 0.9000 |
| 1.0000                    | -0.016          | -0.062          | -0.046          | -0.003          | -0.063          | -0.060          | -0.038          | -0.095          | -0.057          |                 |                 |                 | -0.019          | -0.126          | -0.106          | 0.015           | -0.155          | -0.170          | -0.005          | -0.168          | -0.163          | 1.0000 |
| M = 1.304      α = -00.10 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.148           | 0.102           | -0.046          | 0.052           | 0.077           | 0.025           | 0.033           | 0.053           | 0.020           | -0.035          | 0.020           | 0.055           | -0.009          | -0.008          | 0.001           | -0.082          | -0.050          |                 | 0.0000          |                 |                 | 0.0000 |
| 0.0125                    | 0.085           | 0.079           | -0.006          | 0.021           | 0.044           | 0.024           | 0.018           | 0.025           | 0.007           | -0.018          | 0.008           | 0.025           | -0.019          | 0.012           | 0.030           | -0.017          | -0.008          | 0.009           | -0.079          |                 |                 | 0.0125 |
| 0.0250                    | 0.039           | 0.059           | 0.021           | 0.002           | 0.020           | 0.018           | 0.004           | 0.005           | 0.001           | -0.022          | 0.004           | 0.026           | -0.012          | 0.000           | 0.012           |                 | -0.012          |                 | -0.080          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.001          | 0.030           | 0.030           | 0.000           | -0.003          | -0.003          | -0.022          | -0.013          | 0.009           |                 | -0.008          |                 | -0.027          | -0.031          | -0.004          | -0.041          | -0.035          | 0.006           | -0.096          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.003           | 0.004           | 0.001           | -0.016          | -0.008          | 0.007           | -0.033          | -0.022          | 0.012           | -0.026          |                 |                 | -0.040          | -0.032          | 0.009           | -0.057          | -0.046          | 0.012           | -0.103          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.002          | -0.003          |                 | -0.026          | -0.016          | 0.010           | -0.040          | -0.020          | 0.020           | -0.035          | -0.031          | 0.004           | -0.050          | -0.033          | 0.017           | -0.066          | -0.049          | 0.017           | -0.103          | -0.070          | 0.032           | 0.1000 |
| 0.1500                    | -0.024          | -0.009          | 0.015           | -0.036          | -0.021          | 0.015           | -0.030          | -0.027          | 0.003           | -0.040          | -0.038          | 0.002           | -0.045          | -0.016          | 0.030           | -0.073          | -0.055          | 0.018           | -0.103          | -0.072          | 0.031           | 0.1500 |
| 0.2000                    | -0.036          | -0.020          | 0.016           | -0.021          | -0.015          | 0.006           | -0.029          | -0.014          | 0.015           | -0.046          |                 |                 | -0.032          | -0.028          | 0.003           | -0.075          | -0.057          | 0.018           | -0.104          | -0.081          | 0.023           | 0.2000 |
| 0.3000                    | -0.023          | -0.026          | -0.033          | -0.033          | -0.013          | 0.019           | -0.036          | -0.027          | 0.009           |                 |                 |                 | -0.052          | -0.032          | 0.020           | -0.072          | -0.063          | 0.009           | -0.099          | -0.087          | 0.013           | 0.3000 |
| 0.4000                    | -0.036          | -0.031          | 0.006           | -0.040          | -0.029          | 0.012           | -0.046          | -0.031          | 0.016           |                 |                 |                 | -0.046          | -0.042          | 0.004           | -0.071          | -0.072          | -0.001          | -0.102          | -0.093          | 0.009           | 0.4000 |
| 0.5000                    | -0.044          | -0.038          | 0.005           | -0.039          | -0.044          | -0.005          | -0.052          | -0.054          | -0.002          |                 |                 |                 | -0.064          | -0.049          | 0.016           | -0.067          | -0.065          | 0.002           | -0.101          | -0.096          | 0.006           | 0.5000 |
| 0.6000                    |                 | -0.054          |                 | -0.054          | -0.054          |                 | -0.052          | -0.056          | -0.004          |                 |                 |                 | -0.061          | -0.064          | -0.002          | -0.069          | -0.072          | 0.003           | -0.101          | -0.099          | 0.002           | 0.6000 |
| 0.7000                    | -0.049          |                 |                 | -0.057          | -0.062          | -0.005          | -0.056          | -0.057          | -0.002          |                 |                 |                 | -0.053          | -0.065          | -0.012          | -0.077          | -0.083          | -0.006          | -0.101          | -0.100          | 0.001           | 0.7000 |
| 0.8000                    | -0.078          | -0.079          | -0.001          | -0.076          | -0.081          | -0.004          | -0.073          | -0.074          | -0.002          |                 |                 |                 | -0.064          | -0.073          | -0.009          | -0.078          | -0.083          | -0.005          | -0.101          | -0.099          | 0.002           | 0.8000 |
| 0.9000                    | -0.085          | -0.075          | 0.009           | -0.080          | -0.071          | 0.009           | -0.083          | -0.076          | 0.007           |                 |                 |                 | -0.072          | -0.075          | -0.003          | -0.082          | -0.089          | -0.007          | -0.098          | -0.094          | 0.004           | 0.9000 |
| 1.0000                    | -0.071          | -0.062          | 0.009           | -0.067          | -0.034          | 0.033           | -0.087          | -0.061          | 0.026           |                 |                 |                 | -0.075          | -0.071          | 0.004           | -0.089          | -0.100          | -0.011          | -0.091          | -0.085          | 0.006           | 1.0000 |
| M = 1.303      α = 03.83  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.148          | 0.296           | 0.444           | -0.269          | 0.250           | 0.519           | -0.300          | 0.229           | 0.529           | -0.371          | 0.253           | 0.624           | -0.427          | 0.234           | 0.661           | -0.443          | 0.228           |                 | 0.0000          |                 |                 | 0.0000 |
| 0.0125                    | -0.122          | 0.234           | 0.356           | -0.237          | 0.197           | 0.434           | -0.315          | 0.189           | 0.504           | -0.386          | 0.202           | 0.588           | -0.364          | 0.198           | 0.562           | -0.424          | 0.212           | 0.637           | -0.439          |                 |                 | 0.0125 |
| 0.0250                    | -0.108          | 0.187           | 0.295           | -0.209          | 0.156           | 0.366           | -0.310          | 0.157           | 0.468           | -0.382          | 0.156           | 0.538           | -0.358          | 0.158           | 0.516           |                 | 0.194           |                 | -0.438          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.117          | 0.138           | 0.256           | -0.167          | 0.115           | 0.283           | -0.244          | 0.115           | 0.359           |                 | 0.122           |                 | -0.354          | 0.121           | 0.475           | -0.422          | 0.167           | 0.589           | -0.443          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.108          | 0.100           | 0.207           | -0.129          | 0.094           | 0.223           | -0.171          | 0.086           | 0.257           | -0.162          |                 |                 | -0.231          | 0.100           | 0.331           | -0.426          | 0.129           | 0.554           | -0.440          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.101          | 0.086           | 0.188           | -0.126          | 0.078           | 0.204           | -0.158          | 0.078           | 0.236           | -0.154          | 0.075           | 0.229           | -0.174          | 0.095           | 0.269           | -0.416          | 0.109           | 0.526           | -0.442          | 0.118           | 0.560           | 0.1000 |
| 0.1500                    | -0.104          | 0.070           | 0.174           | -0.114          | 0.059           | 0.174           | -0.125          | 0.062           | 0.187           | -0.149          | 0.070           | 0.220           | -0.160          | 0.083           | 0.243           | -0.354          | 0.088           | 0.442           | -0.445          | 0.102           | 0.548           | 0.1500 |
| 0.2000                    | -0.102          | 0.051           | 0.153           | -0.096          | 0.064           | 0.160           | -0.115          | 0.075           | 0.191           | -0.130          |                 |                 | -0.134          | 0.059           | 0.193           | -0.285          | 0.077           | 0.361           | -0.450          | 0.082           | 0.532           | 0.2000 |
| 0.3000                    | -0.092          | 0.046           | 0.137           | -0.104          | 0.061           | 0.165           | -0.112          | 0.053           | 0.165           |                 |                 |                 | -0.146          | 0.056           | 0.202           | -0.207          | 0.042           | 0.248           | -0.434          | 0.063           | 0.497           | 0.3000 |
| 0.4000                    | -0.103          | 0.037           | 0.141           | -0.111          | 0.037           | 0.148           | -0.124          | 0.038           | 0.162           |                 |                 |                 | -0.130          | 0.027           | 0.157           | -0.168          | 0.036           | 0.205           | -0.423          | 0.047           | 0.470           | 0.4000 |
| 0.5000                    | -0.111          | 0.028           | 0.139           | -0.110          | 0.019           | 0.129           | -0.123          | 0.020           | 0.143           |                 |                 |                 | -0.142          | 0.024           | 0.167           | -0.155          | 0.028           | 0.184           | -0.405          | 0.032           | 0.437           | 0.5000 |
| 0.6000                    |                 | -0.112          |                 | -0.121          | 0.010           | 0.130           | -0.126          | 0.007           | 0.134           |                 |                 |                 | -0.132          | 0.011           | 0.143           | -0.149          | 0.012           | 0.161           | -0.378          | 0.021           | 0.399           | 0.6000 |
| 0.7000                    | -0.109          | -0.112          | -0.120          | 0.001           | 0.121           | -0.120          | 0.005           | 0.134           |                 |                 |                 |                 | -0.131          | 0.007           | 0.124           | -0.145          | 0.014           | 0.160           | -0.348          | 0.019           | 0.366           | 0.7000 |
| 0.8000                    | -0.141          | -0.017          | 0.124           | -0.138          | -0.014          | 0.123           | -0.138          | -0.001          | 0.137           |                 |                 |                 | -0.135          | 0.005           | 0.140           | -0.155          |                 | 0.155           | -0.318          | 0.021           | 0.340           | 0.8000 |
| 0.9000                    | -0.148          | -0.008          | 0.141           | -0.149          | -0.009          | 0.140           | -0.155          | -0.017          | 0.138           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(d) BW - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |     |
| M = 1.301      α = 07.81 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.284          | 0.383           | 0.666           | -0.490          | 0.329           | 0.818           | -0.506          | 0.299           | 0.806           | -0.513          | 0.283           | 0.796           | -0.509          | 0.292           | 0.801           | -0.483          | 0.261           | 0.745           | -0.483          | 0.272           | 0.0000          |     |
| 0.0125                   | -0.413          | 0.341           | 0.754           | -0.488          | 0.295           | 0.783           | -0.506          | 0.278           | 0.784           | -0.518          | 0.277           | 0.796           | -0.497          | 0.274           | 0.771           | -0.481          | 0.269           | 0.751           | -0.489          | 0.272           | 0.0125          |     |
| 0.0250                   | -0.446          | 0.305           | 0.750           | -0.489          | 0.267           | 0.755           | -0.507          | 0.258           | 0.765           | -0.518          | 0.277           | 0.794           | -0.490          | 0.260           | 0.750           | -0.473          | 0.263           | 0.744           | -0.493          | 0.272           | 0.0250          |     |
| 0.0420                   | -0.221          | 0.246           | 0.466           | -0.499          | -0.225          | 0.724           | -0.508          | 0.225           | 0.733           | -0.522          | 0.228           | 0.794           | -0.494          | 0.242           | 0.736           | -0.479          | 0.265           | 0.744           | -0.494          | 0.254           | 0.0420          |     |
| 0.0500                   | -0.221          | 0.246           | 0.466           | -0.499          | -0.225          | 0.724           | -0.508          | 0.225           | 0.733           | -0.522          | 0.228           | 0.794           | -0.494          | 0.242           | 0.736           | -0.479          | 0.265           | 0.744           | -0.494          | 0.254           | 0.0500          |     |
| 0.0640                   | -0.200          | 0.204           | 0.404           | -0.406          | 0.200           | 0.606           | -0.503          | 0.202           | 0.705           | -0.522          | 0.228           | 0.794           | -0.498          | 0.226           | 0.724           | -0.481          | 0.240           | 0.721           | -0.495          | 0.244           | 0.0640          |     |
| 0.0750                   | -0.198          | 0.190           | 0.388           | -0.264          | 0.180           | 0.444           | -0.476          | 0.183           | 0.660           | -0.497          | 0.193           | 0.690           | -0.506          | 0.204           | 0.710           | -0.483          | 0.215           | 0.699           | -0.496          | 0.235           | 0.0750          |     |
| 0.0810                   | -0.177          | 0.163           | 0.341           | -0.162          | 0.158           | 0.320           | -0.397          | 0.159           | 0.556           | -0.453          | 0.184           | 0.637           | -0.495          | 0.174           | 0.669           | -0.489          | 0.186           | 0.675           | -0.495          | 0.217           | 0.0810          |     |
| 0.1000                   | -0.177          | 0.141           | 0.311           | -0.167          | 0.159           | 0.326           | -0.168          | 0.186           | 0.354           | -0.373          | 0.184           | 0.637           | -0.489          | 0.165           | 0.655           | -0.499          | 0.167           | 0.666           | -0.497          | 0.200           | 0.1000          |     |
| 0.1500                   | -0.170          | 0.143           | 0.300           | -0.155          | 0.149           | 0.304           | -0.163          | 0.145           | 0.309           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 0.1500          |     |
| 0.2000                   | -0.157          | 0.141           | 0.300           | -0.155          | 0.149           | 0.304           | -0.163          | 0.145           | 0.309           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 0.2000          |     |
| 0.3000                   | -0.163          | 0.117           | 0.280           | -0.164          | 0.123           | 0.287           | -0.170          | 0.115           | 0.285           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 0.3000          |     |
| 0.4000                   | -0.163          | 0.117           | 0.280           | -0.164          | 0.123           | 0.287           | -0.170          | 0.115           | 0.285           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 0.4000          |     |
| 0.5000                   | -0.175          | 0.108           | 0.282           | -0.177          | 0.104           | 0.281           | -0.182          | 0.106           | 0.287           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 0.5000          |     |
| 0.6000                   | -0.175          | 0.108           | 0.282           | -0.177          | 0.104           | 0.281           | -0.182          | 0.106           | 0.287           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 0.6000          |     |
| 0.7000                   | -0.174          | 0.070           | 0.268           | -0.181          | 0.087           | 0.268           | -0.187          | 0.088           | 0.275           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 0.7000          |     |
| 0.8000                   | -0.198          | 0.070           | 0.268           | -0.181          | 0.087           | 0.268           | -0.187          | 0.088           | 0.275           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 0.8000          |     |
| 0.9000                   | -0.197          | 0.091           | 0.299           | -0.197          | 0.097           | 0.294           | -0.201          | 0.085           | 0.286           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 0.9000          |     |
| 1.0000                   | -0.172          | 0.137           | 0.309           | -0.192          | 0.149           | 0.341           | -0.205          | 0.118           | 0.323           | -0.373          | 0.184           | 0.637           | -0.489          | 0.133           | 0.502           | -0.504          | 0.155           | 0.659           | -0.497          | 0.184           | 1.0000          |     |
| M = 1.301      α = 11.84 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.534          | 0.426           | 0.960           | -0.598          | 0.371           | 0.969           | -0.585          | 0.325           | 0.910           | -0.564          | 0.327           | 0.891           | -0.550          | 0.313           | 0.863           | -0.525          | 0.241           | 0.766           | -0.532          | 0.321           | 0.0000          |     |
| 0.0125                   | -0.586          | 0.430           | 1.015           | -0.591          | 0.380           | 0.971           | -0.583          | 0.347           | 0.930           | -0.564          | 0.327           | 0.891           | -0.541          | 0.341           | 0.886           | -0.525          | 0.241           | 0.766           | -0.532          | 0.321           | 0.0125          |     |
| 0.0250                   | -0.600          | 0.400           | 1.023           | -0.591          | 0.379           | 0.970           | -0.582          | 0.356           | 0.938           | -0.563          | 0.345           | 0.908           | -0.541          | 0.356           | 0.897           | -0.525          | 0.241           | 0.766           | -0.532          | 0.321           | 0.0250          |     |
| 0.0420                   | -0.519          | 0.376           | 0.895           | -0.613          | 0.342           | 0.955           | -0.582          | 0.331           | 0.913           | -0.563          | 0.345           | 0.908           | -0.541          | 0.356           | 0.897           | -0.525          | 0.241           | 0.766           | -0.532          | 0.321           | 0.0420          |     |
| 0.0500                   | -0.519          | 0.376           | 0.895           | -0.613          | 0.342           | 0.955           | -0.582          | 0.331           | 0.913           | -0.563          | 0.345           | 0.908           | -0.541          | 0.356           | 0.897           | -0.525          | 0.241           | 0.766           | -0.532          | 0.321           | 0.0500          |     |
| 0.0640                   | -0.330          | 0.340           | 0.670           | -0.617          | 0.321           | 0.938           | -0.601          | 0.310           | 0.911           | -0.577          | 0.342           | 0.908           | -0.541          | 0.356           | 0.897           | -0.525          | 0.241           | 0.766           | -0.532          | 0.321           | 0.0640          |     |
| 0.0750                   | -0.287          | 0.311           | 0.598           | -0.605          | 0.295           | 0.901           | -0.610          | 0.295           | 0.905           | -0.593          | 0.318           | 0.910           | -0.559          | 0.323           | 0.882           | -0.530          | 0.323           | 0.853           | -0.545          | 0.329           | 0.0750          |     |
| 0.0810                   | -0.287          | 0.311           | 0.598           | -0.605          | 0.295           | 0.901           | -0.610          | 0.295           | 0.905           | -0.593          | 0.318           | 0.910           | -0.559          | 0.323           | 0.882           | -0.530          | 0.323           | 0.853           | -0.545          | 0.329           | 0.0810          |     |
| 0.1000                   | -0.246          | 0.277           | 0.523           | -0.494          | 0.262           | 0.756           | -0.619          | 0.290           | 0.909           | -0.626          | 0.296           | 0.922           | -0.594          | 0.295           | 0.889           | -0.541          | 0.309           | 0.849           | -0.546          | 0.318           | 0.1000          |     |
| 0.1500                   | -0.219          | 0.250           | 0.469           | -0.211          | 0.278           | 0.489           | -0.615          | 0.291           | 0.906           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 0.1500          |     |
| 0.2000                   | -0.197          | 0.258           | 0.455           | -0.190          | 0.250           | 0.440           | -0.225          | 0.252           | 0.478           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 0.2000          |     |
| 0.3000                   | -0.204          | 0.219           | 0.423           | -0.210          | 0.222           | 0.432           | -0.203          | 0.228           | 0.432           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 0.3000          |     |
| 0.4000                   | -0.204          | 0.219           | 0.423           | -0.210          | 0.222           | 0.432           | -0.203          | 0.228           | 0.432           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 0.4000          |     |
| 0.5000                   | -0.219          | 0.210           | 0.430           | -0.217          | 0.213           | 0.430           | -0.209          | 0.216           | 0.425           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 0.5000          |     |
| 0.6000                   | -0.219          | 0.210           | 0.430           | -0.217          | 0.213           | 0.430           | -0.209          | 0.216           | 0.425           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 0.6000          |     |
| 0.7000                   | -0.213          | 0.202           | 0.420           | -0.221          | 0.200           | 0.420           | -0.220          | 0.204           | 0.424           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 0.7000          |     |
| 0.8000                   | -0.232          | 0.181           | 0.413           | -0.232          | 0.184           | 0.416           | -0.233          | 0.198           | 0.431           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 0.8000          |     |
| 0.9000                   | -0.237          | 0.153           | 0.390           | -0.239          | 0.159           | 0.399           | -0.245          | 0.158           | 0.403           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 0.9000          |     |
| 1.0000                   | -0.229          | 0.112           | 0.341           | -0.250          | 0.147           | 0.397           | -0.262          | 0.101           | 0.363           | -0.630          | 0.296           | 0.922           | -0.594          | 0.270           | 0.890           | -0.550          | 0.289           | 0.839           | -0.549          | 0.307           | 1.0000          |     |
| M = 1.300      α = 15.87 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.651          | 0.471           | 1.122           | -0.670          | 0.398           | 1.068           | -0.643          | 0.349           | 0.992           | -0.614          | 0.363           | 0.977           | -0.591          | 0.299           | 0.890           | -0.586          | 0.211           | 0.797           | -0.599          | 0.280           | 0.0000          |     |
| 0.0125                   | -0.661          | 0.517           | 1.179           | -0.662          | 0.445           | 1.106           | -0.638          | 0.402           | 1.040           | -0.614          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.0125          |     |
| 0.0250                   | -0.669          | 0.537           | 1.207           | -0.659          | 0.470           | 1.129           | -0.635          | 0.435           | 1.070           | -0.613          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.0250          |     |
| 0.0420                   | -0.677          | 0.500           | 1.177           | -0.671          | 0.455           | 1.126           | -0.635          | 0.439           | 1.074           | -0.613          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.0420          |     |
| 0.0500                   | -0.677          | 0.500           | 1.177           | -0.671          | 0.455           | 1.126           | -0.635          | 0.439           | 1.074           | -0.613          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.0500          |     |
| 0.0640                   | -0.665          | 0.464           | 1.130           | -0.695          | 0.436           | 1.131           | -0.644          | 0.426           | 1.069           | -0.615          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.0640          |     |
| 0.0750                   | -0.580          | 0.436           | 1.016           | -0.697          | 0.414           | 1.111           | -0.684          | 0.425           | 1.108           | -0.640          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.0750          |     |
| 0.0810                   | -0.580          | 0.436           | 1.016           | -0.697          | 0.414           | 1.111           | -0.684          | 0.425           | 1.108           | -0.640          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.0810          |     |
| 0.1000                   | -0.351          | 0.397           | 0.748           | -0.676          | 0.396           | 1.073           | -0.697          | 0.425           | 1.108           | -0.640          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.1000          |     |
| 0.1500                   | -0.289          | 0.375           | 0.665           | -0.646          | 0.397           | 0.943           | -0.704          | 0.402           | 1.106           | -0.694          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.1500          |     |
| 0.2000                   | -0.258          | 0.358           | 0.616           | -0.632          | 0.356           | 0.888           | -0.693          | 0.369           | 0.962           | -0.694          | 0.363           | 0.977           | -0.591          | 0.372           | 0.963           | -0.585          | 0.314           | 0.899           | -0.603          | 0.280           | 0.2000          |     |
| 0.3000                   | -0.272          | 0.325           | 0.597           | -0.297          | 0.347           | 0.644           | -0.398          | 0.365           | 0.763           | -0.694          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued

(d) BW - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |     |
| M = 1.500      α = 03.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.117          | 0.260           | 0.377           | -0.247          | 0.240           | 0.487           | -0.273          | 0.228           | 0.500           |                 |                 |                 | -0.326          | 0.244           | 0.569           | -0.391          | 0.247           | 0.637           | -0.482          | 0.222           | 0.0000          |     |
| 0.0125                   | -0.116          | 0.205           | 0.321           | -0.212          | 0.185           | 0.398           | -0.259          | 0.185           | 0.444           | -0.309          | 0.203           | 0.512           | -0.305          | 0.193           | 0.499           | -0.374          | 0.203           | 0.577           | -0.447          |                 | 0.0125          |     |
| 0.0250                   | -0.116          | 0.163           | 0.278           | -0.186          | 0.144           | 0.330           | -0.246          | 0.153           | 0.399           | -0.290          | 0.162           | 0.452           | -0.293          | 0.155           | 0.448           |                 | 0.169           |                 | -0.424          | 0.158           | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.119          | 0.116           | 0.235           | -0.156          | 0.103           | 0.259           | -0.217          | 0.119           | 0.336           |                 | 0.125           |                 | -0.290          | 0.117           | 0.408           | -0.348          | 0.133           | 0.481           | -0.417          | 0.135           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.109          | 0.089           | 0.198           | -0.138          | 0.086           | 0.224           | -0.165          | 0.101           | 0.266           | -0.146          |                 |                 | -0.260          | 0.104           | 0.365           | -0.350          | 0.114           | 0.464           | -0.416          | 0.123           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.108          | 0.076           | 0.185           | -0.123          | 0.075           | 0.198           | -0.140          | 0.089           | 0.229           | -0.132          | 0.077           | 0.209           | -0.169          | 0.093           | 0.262           | -0.347          | 0.104           | 0.451           | -0.419          | 0.113           | 0.1000          |     |
| 0.1500                   | -0.101          | 0.066           | 0.168           | -0.098          | 0.067           | 0.166           | -0.113          | 0.060           | 0.172           | -0.118          | 0.064           | 0.182           | -0.130          | 0.073           | 0.203           | -0.309          | 0.077           | 0.387           | -0.418          | 0.096           | 0.1500          |     |
| 0.2000                   | -0.085          | 0.058           | 0.143           | -0.084          | 0.058           | 0.142           | -0.095          | 0.068           | 0.164           | -0.098          |                 |                 | -0.112          | 0.056           | 0.168           | -0.205          | 0.061           | 0.266           | -0.418          | 0.080           | 0.2000          |     |
| 0.3000                   | -0.068          | 0.037           | 0.105           | -0.074          | 0.042           | 0.116           | -0.088          | 0.039           | 0.127           |                 |                 |                 | -0.108          | 0.048           | 0.156           | -0.147          | 0.039           | 0.186           | -0.374          | 0.057           | 0.3000          |     |
| 0.4000                   | -0.082          | 0.022           | 0.104           | -0.086          | 0.031           | 0.118           | -0.092          | 0.032           | 0.125           |                 |                 |                 | -0.108          | 0.031           | 0.139           | -0.142          | 0.039           | 0.181           | -0.308          | 0.037           | 0.4000          |     |
| 0.5000                   | -0.098          | 0.020           | 0.119           | -0.099          | 0.020           | 0.119           | -0.101          | 0.022           | 0.123           |                 |                 |                 | -0.107          | 0.025           | 0.132           | -0.144          | 0.024           | 0.168           | -0.242          | 0.028           | 0.5000          |     |
| 0.6000                   |                 | 0.011           |                 | -0.097          | 0.008           | 0.105           | -0.104          | 0.014           | 0.118           |                 |                 |                 | -0.110          | 0.027           | 0.136           | -0.131          | 0.018           | 0.149           | -0.213          | 0.018           | 0.6000          |     |
| 0.7000                   | -0.094          |                 |                 | -0.105          | 0.016           | 0.120           | -0.107          | 0.017           | 0.124           |                 |                 |                 | -0.110          | 0.012           | 0.122           | -0.136          | 0.014           | 0.149           | -0.200          | 0.014           | 0.7000          |     |
| 0.8000                   | -0.127          | -0.002          | 0.125           | -0.124          | 0.004           | 0.128           | -0.124          | 0.014           | 0.138           |                 |                 |                 | -0.115          | 0.015           | 0.130           | -0.141          | -0.001          | 0.140           | -0.192          | 0.010           | 0.8000          |     |
| 0.9000                   | -0.124          | 0.005           | 0.129           | -0.120          | 0.001           | 0.121           | -0.122          | -0.004          | 0.117           |                 |                 |                 | -0.121          | -0.003          | 0.118           | -0.130          | 0.003           | 0.133           | -0.188          | 0.017           | 0.9000          |     |
| 1.0000                   | -0.086          | 0.020           | 0.106           | -0.091          | 0.007           | 0.098           | -0.100          | -0.038          | 0.062           |                 |                 |                 | -0.131          | -0.042          | 0.088           | -0.102          | 0.025           | 0.127           | -0.188          | 0.035           | 1.0000          |     |
| M = 1.703      α = 03.73 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.095          | 0.254           | 0.349           | -0.201          | 0.248           | 0.449           | -0.230          | 0.253           | 0.483           | -0.303          | 0.234           | 0.537           | -0.303          | 0.234           | 0.537           | -0.298          | 0.235           | 0.533           | -0.317          | 0.188           | 0.0000          |     |
| 0.0125                   | -0.094          | 0.200           | 0.294           | -0.164          | 0.195           | 0.359           | -0.189          | 0.199           | 0.388           | -0.227          | 0.200           | 0.427           | -0.254          | 0.189           | 0.443           | -0.287          | 0.190           | 0.477           | -0.325          |                 | 0.0125          |     |
| 0.0250                   | -0.093          | 0.160           | 0.253           | -0.137          | 0.155           | 0.291           | -0.161          | 0.159           | 0.320           | -0.202          | 0.155           | 0.357           | -0.222          | 0.154           | 0.376           |                 | 0.155           |                 | -0.328          | 0.135           | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.090          | 0.125           | 0.215           | -0.111          | 0.115           | 0.226           | -0.145          | 0.118           | 0.263           |                 | 0.115           |                 | -0.209          | 0.116           | 0.325           | -0.261          | 0.115           | 0.375           | -0.316          | 0.135           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.074          | 0.103           | 0.177           | -0.096          | 0.102           | 0.198           | -0.128          | 0.092           | 0.220           | -0.168          |                 |                 | -0.202          | 0.096           | 0.298           | -0.251          | 0.090           | 0.341           | -0.309          | 0.102           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.065          | 0.093           | 0.158           | -0.083          | 0.081           | 0.164           | -0.106          | 0.078           | 0.185           | -0.147          | 0.080           | 0.227           | -0.196          | 0.084           | 0.280           | -0.242          | 0.077           | 0.318           | -0.302          | 0.094           | 0.1000          |     |
| 0.1500                   | -0.060          | 0.068           | 0.128           | -0.076          | 0.058           | 0.134           | -0.097          | 0.072           | 0.168           | -0.119          | 0.054           | 0.173           | -0.157          | 0.073           | 0.229           | -0.244          | 0.059           | 0.303           | -0.293          | 0.078           | 0.1500          |     |
| 0.2000                   | -0.071          | 0.049           | 0.121           | -0.081          | 0.064           | 0.145           | -0.097          | 0.076           | 0.174           | -0.113          |                 |                 | -0.124          | 0.050           | 0.174           | -0.238          | 0.059           | 0.297           | -0.289          | 0.066           | 0.2000          |     |
| 0.3000                   | -0.087          | 0.051           | 0.137           | -0.094          | 0.044           | 0.139           | -0.101          | 0.053           | 0.154           |                 |                 |                 | -0.100          | 0.037           | 0.137           | -0.192          | 0.032           | 0.224           | -0.275          | 0.051           | 0.3000          |     |
| 0.4000                   | -0.076          | 0.014           | 0.090           | -0.073          | 0.020           | 0.093           | -0.081          | 0.024           | 0.105           |                 |                 |                 | -0.086          | 0.026           | 0.111           | -0.126          | 0.020           | 0.147           | -0.284          | 0.036           | 0.4000          |     |
| 0.5000                   | -0.077          | 0.025           | 0.102           | -0.077          | 0.029           | 0.106           | -0.075          | 0.018           | 0.093           |                 |                 |                 | -0.093          | 0.025           | 0.118           | -0.120          | 0.028           | 0.148           | -0.283          | 0.025           | 0.5000          |     |
| 0.6000                   |                 | 0.027           |                 | -0.086          | 0.022           | 0.108           | -0.091          | 0.021           | 0.112           |                 |                 |                 | -0.099          | 0.023           | 0.122           | -0.116          | 0.009           | 0.125           | -0.268          | 0.010           | 0.6000          |     |
| 0.7000                   | -0.067          |                 |                 | -0.086          | 0.011           | 0.097           | -0.095          | 0.020           | 0.115           |                 |                 |                 | -0.098          | 0.020           | 0.118           | -0.118          | 0.017           | 0.135           | -0.239          | 0.012           | 0.7000          |     |
| 0.8000                   | -0.106          | 0.000           | 0.107           | -0.102          | 0.003           | 0.104           | -0.105          | 0.000           | 0.105           |                 |                 |                 | -0.102          | 0.004           | 0.106           | -0.123          | 0.011           | 0.134           | -0.200          | 0.014           | 0.8000          |     |
| 0.9000                   | -0.117          | -0.010          | 0.107           | -0.112          | -0.009          | 0.104           | -0.117          | -0.010          | 0.107           |                 |                 |                 | -0.108          | -0.006          | 0.102           | -0.118          | -0.006          | 0.111           | -0.174          | 0.026           | 0.9000          |     |
| 1.0000                   | -0.099          | -0.020          | 0.080           | -0.118          | -0.023          | 0.095           | -0.134          | -0.012          | 0.122           |                 |                 |                 | -0.118          | -0.011          | 0.107           | -0.104          | -0.037          | 0.068           | -0.162          | 0.046           | 1.0000          |     |
| M = 1.906      α = 03.93 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.074          | 0.282           | 0.356           | -0.128          | 0.255           | 0.383           | -0.144          | 0.231           | 0.375           | -0.181          | 0.259           | 0.440           | -0.180          | 0.244           | 0.424           | -0.169          | 0.201           |                 |                 |                 | 0.0000          |     |
| 0.0125                   | -0.070          | 0.216           | 0.286           | -0.115          | 0.205           | 0.319           | -0.141          | 0.193           | 0.334           | -0.167          | 0.215           | 0.382           | -0.166          | 0.211           | 0.377           | -0.177          | 0.206           | 0.382           | -0.198          |                 | 0.0125          |     |
| 0.0250                   | -0.067          | 0.168           | 0.236           | -0.105          | 0.165           | 0.269           | -0.137          | 0.163           | 0.300           | -0.156          | 0.177           | 0.332           | -0.155          | 0.175           | 0.330           |                 | 0.175           |                 | -0.214          | 0.149           | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.069          | 0.127           | 0.195           | -0.094          | 0.118           | 0.212           | -0.125          | 0.131           | 0.256           |                 | 0.140           |                 | -0.145          | 0.138           | 0.283           | -0.174          | 0.140           | 0.314           | -0.207          | 0.130           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.063          | 0.100           | 0.163           | -0.089          | 0.101           | 0.189           | -0.114          | 0.114           | 0.228           | -0.129          |                 |                 | -0.141          | 0.117           | 0.258           | -0.179          | 0.118           | 0.296           | -0.206          | 0.119           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.061          | 0.099           | 0.160           | -0.085          | 0.086           | 0.171           | -0.110          | 0.104           | 0.214           | -0.125          | 0.099           | 0.224           | -0.137          | 0.105           | 0.242           | -0.177          | 0.107           | 0.284           | -0.203          | 0.112           | 0.1000          |     |
| 0.1500                   | -0.057          | 0.081           | 0.138           | -0.078          | 0.084           | 0.162           | -0.107          | 0.088           | 0.195           | -0.117          | 0.077           | 0.194           | -0.133          | 0.092           | 0.225           | -0.178          | 0.084           | 0.262           | -0.202          | 0.099           | 0.1500          |     |
| 0.2000                   | -0.062          | 0.073           | 0.135           | -0.067          | 0.079           | 0.146           | -0.085          | 0.093           | 0.178           | -0.095          |                 |                 | -0.127          | 0.082           | 0.210           | -0.165          | 0.074           | 0.238           | -0.214          | 0.087           | 0.2000          |     |
| 0.3000                   | -0.064          | 0.054           | 0.117           | -0.061          | 0.064           | 0.126           | -0.076          | 0.060           | 0.137           |                 |                 |                 | -0.081          | 0.071           | 0.152           | -0.173          | 0.048           | 0.221           | -0.189          | 0.068           | 0.3000          |     |
| 0.4000                   | -0.062          | 0.039           | 0.101           | -0.064          | 0.066           | 0.110           | -0.075          | 0.067           | 0.122           |                 |                 |                 | -0.082          | 0.048           | 0.130           | -0.165          | 0.038           | 0.202           | -0.199          | 0.049           | 0.4000          |     |
| 0.5000                   | -0.069          | 0.031           | 0.101           | -0.071          | 0.029           | 0.100           | -0.076          | 0.026           | 0.102           |                 |                 |                 | -0.085          | 0.031           | 0.116           | -0.191          | 0.031           | 0.161           | -0.202          | 0.038           | 0.5000          |     |
| 0.6000                   |                 | 0.019           |                 | -0.070          | 0.011           | 0.081           | -0.079          | 0.010           | 0.090           |                 |                 |                 | -0.084          | 0.015           | 0.099           | -0.104          | 0.016           | 0.120           | -0.200          | 0.023           | 0.6000          |     |
| 0.7000                   | -0.046          |                 |                 | -0.074          | 0.017           | 0.091           | -0.080          | 0.016           | 0.096           |                 |                 |                 | -0.081          | 0.016           | 0.097           | -0.099          | 0.015           | 0.114           | -0.198          | 0.018           | 0.7000          |     |
| 0.8000                   | -0.090          | -0.002          | 0.088           | -0.087          | 0.005           | 0.092           | -0.086          | 0.009           | 0.095           |                 |                 |                 | -0.086          | 0.009           | 0.095           | -0.103          | 0.008           | 0.111           | -0.195          | 0.016           | 0.8000          |     |
| 0.9000                   | -0.096          | -0.007          | 0.088           | -0.089          | -0.004          | 0.085           | -0.095          | 0.001           | 0.095           |                 |                 |                 | -0.085          | 0.007           | 0.093           | -0.099          | -0.001          | 0.098           | -0.192          | 0.022           | 0.9000          |     |
| 1.0000                   | -0.063          | -0.009          | 0.054           | -0.080          | -0.010          | 0.070           | -0.107          | -0.010          | 0.097           |                 |                 |                 | -0.079          | 0.010           | 0.090           | -0.087          | -0.012          | 0.075           | -0.187          | 0.035           | 1.0000          |     |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(d) BW - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 2.229      α = -03.88 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.237           | -0.050          | -0.286          | 0.208           | -0.055          | -0.263          | 0.170           | -0.060          | -0.231          |                 |                 |                 | 0.218           | -0.054          | -0.272          | 0.213           | -0.067          | -0.280          | 0.231           | -0.135          |                 | 0.0000 |
| 0.0125                    | 0.175           | -0.045          | -0.220          | 0.163           | -0.059          | -0.221          | 0.156           | -0.070          | -0.226          | 0.163           | -0.067          | -0.230          | 0.175           | -0.062          | -0.237          | 0.183           | -0.068          | -0.251          | 0.179           |                 |                 | 0.0125 |
| 0.0250                    | 0.129           | -0.042          | -0.171          | 0.128           | -0.061          | -0.189          | 0.139           | -0.075          | -0.214          | 0.132           | -0.076          | -0.208          | 0.141           | -0.065          | -0.206          |                 | -0.070          |                 | 0.141           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.081           | -0.040          | -0.121          | 0.092           | -0.060          | -0.152          | 0.092           | -0.075          | -0.167          |                 | -0.081          |                 | 0.105           | -0.056          | -0.161          | 0.118           | -0.082          | -0.200          | 0.111           | -0.092          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.085           | -0.069          | -0.154          | 0.095           | -0.085          | -0.179          | 0.095           | -0.089          |                 | 0.0640 |
| 0.0750                    | 0.078           | -0.044          | -0.122          | 0.073           | -0.058          | -0.131          | 0.075           | -0.071          | -0.146          | 0.078           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.062           | -0.044          | -0.107          | 0.061           | -0.058          | -0.120          | 0.063           | -0.067          | -0.130          | 0.067           | -0.071          | -0.137          | 0.070           | -0.076          | -0.145          | 0.077           | -0.091          | -0.167          | 0.084           | -0.097          | -0.180          | 0.1000 |
| 0.1500                    | 0.052           | -0.040          | -0.092          | 0.049           | -0.058          | -0.107          | 0.051           | -0.062          | -0.113          | 0.049           | -0.068          | -0.117          | 0.053           | -0.071          | -0.124          | 0.057           | -0.097          | -0.154          | 0.071           | -0.096          | -0.167          | 0.1500 |
| 0.2000                    | 0.039           | -0.043          | -0.082          | 0.041           | -0.054          | -0.095          | 0.044           | 0.009           | -0.035          | 0.043           |                 |                 | 0.045           | -0.069          | -0.114          | 0.052           | -0.092          | -0.143          | 0.057           | -0.098          | -0.156          | 0.2000 |
| 0.3000                    | 0.029           | -0.049          | -0.078          | 0.027           | -0.028          | -0.056          | 0.026           | -0.062          | -0.088          |                 |                 |                 | 0.033           | -0.067          | -0.100          | 0.036           | -0.100          | -0.136          | 0.055           | -0.100          | -0.155          | 0.3000 |
| 0.4000                    | 0.015           | -0.046          | -0.061          | 0.016           | -0.047          | -0.063          | 0.016           | -0.055          | -0.071          |                 |                 |                 | 0.022           | -0.056          | -0.078          | 0.034           | -0.101          | -0.134          | 0.035           | -0.103          | -0.138          | 0.4000 |
| 0.5000                    | 0.008           | -0.049          | -0.058          | 0.009           | -0.050          | -0.060          | 0.011           | -0.055          | -0.066          |                 |                 |                 | 0.014           | -0.055          | -0.069          | 0.022           | -0.098          | -0.120          | 0.029           | -0.107          | -0.136          | 0.5000 |
| 0.6000                    |                 | -0.052          |                 | 0.008           | -0.054          | -0.062          | 0.005           | -0.060          | -0.065          |                 |                 |                 | 0.008           | -0.061          | -0.069          | 0.014           | -0.098          | -0.112          | 0.024           | -0.115          | -0.139          | 0.6000 |
| 0.7000                    | 0.043           |                 |                 | 0.008           | -0.052          | -0.060          | 0.007           | -0.055          | -0.062          |                 |                 |                 | 0.008           | -0.060          | -0.068          | 0.008           | -0.087          | -0.095          | 0.022           | -0.113          | -0.135          | 0.7000 |
| 0.8000                    | 0.001           | -0.065          | -0.066          | 0.005           | -0.058          | -0.063          | 0.007           | -0.059          | -0.066          |                 |                 |                 | 0.005           | -0.056          | -0.061          | 0.001           | -0.083          | -0.084          | 0.018           | -0.113          | -0.131          | 0.8000 |
| 0.9000                    | 0.001           | -0.063          | -0.065          | 0.002           | -0.059          | -0.061          | 0.005           | -0.062          | -0.057          |                 |                 |                 | 0.008           | -0.061          | -0.058          | 0.001           | -0.077          | -0.079          | 0.011           | -0.108          | -0.120          | 0.9000 |
| 1.0000                    | 0.043           | -0.057          | -0.100          | -0.001          | -0.055          | -0.054          | -0.029          | -0.063          | -0.034          |                 |                 |                 | 0.016           | -0.074          | -0.089          | 0.009           | -0.069          | -0.078          | 0.001           | -0.099          | -0.100          | 1.0000 |
| M = 2.226      α = 00.25  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.108           | 0.124           | 0.016           | 0.080           | 0.119           | 0.039           | 0.049           | 0.094           | 0.046           |                 |                 |                 | 0.067           | 0.127           | 0.059           | 0.062           | 0.127           | 0.065           | 0.049           | 0.058           |                 | 0.0000 |
| 0.0125                    | 0.067           | 0.090           | 0.023           | 0.051           | 0.084           | 0.034           | 0.042           | 0.074           | 0.032           | 0.041           | 0.084           | 0.043           | 0.047           | 0.098           | 0.050           | 0.045           | 0.091           | 0.046           | 0.025           |                 |                 | 0.0125 |
| 0.0250                    | 0.037           | 0.065           | 0.029           | 0.028           | 0.058           | 0.030           | 0.032           | 0.057           | 0.025           | 0.021           | 0.056           | 0.034           | 0.031           | 0.075           | 0.044           |                 | 0.063           |                 | 0.007           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.010           | 0.042           | 0.032           | 0.005           | 0.032           | 0.027           | 0.007           | 0.036           | 0.029           |                 | 0.027           |                 | 0.011           | 0.052           | 0.042           | 0.007           | 0.034           | 0.027           | -0.008          | 0.038           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.008           | 0.025           | 0.017           | -0.003          | 0.020           | 0.023           | -0.005          | 0.020           | 0.025           | -0.011          |                 |                 | -0.002          | 0.033           | 0.034           | -0.008          | 0.020           | 0.028           | -0.019          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.003           | 0.021           | 0.018           | -0.007          | 0.013           | 0.020           | -0.013          | 0.011           | 0.024           | -0.017          | 0.013           | 0.030           | -0.012          | 0.018           | 0.030           | -0.020          | 0.011           | 0.031           | -0.025          | 0.013           | 0.039           | 0.1000 |
| 0.1500                    | -0.001          | 0.016           | 0.017           | -0.012          | 0.005           | 0.016           | -0.018          | 0.005           | 0.022           | -0.024          | 0.006           | 0.030           | -0.018          | 0.008           | 0.026           | -0.035          | -0.001          | 0.033           | -0.035          | 0.006           | 0.040           | 0.1500 |
| 0.2000                    | -0.011          | 0.006           | 0.017           | -0.014          | 0.002           | 0.016           | -0.019          | 0.035           | 0.053           | -0.024          |                 |                 | -0.022          | 0.003           | 0.024           | -0.035          | -0.004          | 0.031           | -0.048          | -0.002          | 0.046           | 0.2000 |
| 0.3000                    | -0.018          | -0.007          | 0.011           | -0.022          | 0.015           | 0.037           | -0.025          | 0.002           | 0.027           |                 |                 |                 | -0.025          | -0.002          | 0.023           | -0.043          | -0.016          | 0.026           | -0.040          | -0.010          | 0.030           | 0.3000 |
| 0.4000                    | -0.028          | -0.010          | 0.018           | -0.029          | 0.019           | 0.029           | -0.029          | -0.011          | 0.018           |                 |                 |                 | -0.027          | -0.003          | 0.024           | -0.039          | -0.019          | 0.020           | -0.056          | -0.019          | 0.037           | 0.4000 |
| 0.5000                    | -0.031          | -0.012          | 0.020           | -0.031          | -0.012          | 0.019           | -0.030          | -0.012          | 0.017           |                 |                 |                 | -0.029          | -0.012          | 0.018           | -0.041          | -0.022          | 0.019           | -0.061          | -0.022          | 0.038           | 0.5000 |
| 0.6000                    |                 | -0.018          |                 | -0.029          | -0.019          | 0.010           | -0.033          | -0.019          | 0.014           |                 |                 |                 | -0.033          | -0.017          | 0.016           | -0.041          | -0.026          | 0.016           | -0.062          | -0.033          | 0.030           | 0.6000 |
| 0.7000                    | 0.009           |                 |                 | -0.029          | -0.017          | 0.011           | -0.032          | -0.018          | 0.014           |                 |                 |                 | -0.031          | -0.020          | 0.011           | -0.042          | -0.028          | 0.014           | -0.063          | -0.032          | 0.031           | 0.7000 |
| 0.8000                    | -0.033          | -0.030          | 0.003           | -0.031          | -0.023          | 0.009           | -0.030          | -0.017          | 0.012           |                 |                 |                 | -0.032          | -0.018          | 0.014           | -0.046          | -0.034          | 0.013           | -0.062          | -0.033          | 0.029           | 0.8000 |
| 0.9000                    | -0.033          | -0.028          | 0.005           | -0.033          | -0.025          | 0.009           | -0.039          | -0.025          | 0.014           |                 |                 |                 | -0.032          | -0.020          | 0.012           | -0.044          | -0.035          | 0.009           | -0.062          | -0.030          | 0.032           | 0.9000 |
| 1.0000                    | 0.010           | -0.021          | -0.031          | -0.035          | -0.024          | 0.011           | -0.059          | -0.042          | 0.017           |                 |                 |                 | -0.032          | -0.026          | 0.005           | -0.035          | -0.032          | 0.003           | -0.062          | -0.021          | 0.040           | 1.0000 |
| M = 2.229      α = 04.13  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.060          | 0.265           | 0.325           | -0.071          | 0.240           | 0.310           | -0.096          | 0.249           | 0.344           |                 |                 |                 | -0.049          | 0.242           | 0.291           | -0.091          | 0.248           | 0.340           | -0.095          | 0.205           |                 | 0.0000 |
| 0.0125                    | -0.062          | 0.202           | 0.264           | -0.081          | 0.194           | 0.276           | -0.093          | 0.192           | 0.285           | -0.103          | 0.197           | 0.300           | -0.077          | 0.201           | 0.278           | -0.094          | 0.208           | 0.302           | -0.114          |                 |                 | 0.0125 |
| 0.0250                    | -0.064          | 0.157           | 0.221           | -0.088          | 0.158           | 0.246           | -0.093          | 0.152           | 0.244           | -0.104          | 0.157           | 0.261           | -0.094          | 0.169           | 0.263           |                 | 0.177           |                 | -0.126          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.067          | 0.122           | 0.189           | -0.088          | 0.113           | 0.200           | -0.099          | 0.119           | 0.218           |                 |                 |                 | -0.094          | 0.137           | 0.231           | -0.102          | 0.143           | 0.245           | -0.124          | 0.157           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.066          | 0.095           | 0.160           | -0.084          | 0.094           | 0.178           | -0.096          | 0.094           | 0.191           | -0.106          |                 |                 | -0.102          | 0.115           | 0.217           | -0.108          | 0.120           | 0.228           | -0.126          | 0.139           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.066          | 0.086           | 0.152           | -0.082          | 0.080           | 0.162           | -0.093          | 0.084           | 0.177           | -0.104          | 0.089           | 0.192           | -0.108          | 0.099           | 0.207           | -0.113          | 0.109           | 0.221           | -0.125          | 0.128           | 0.245           | 0.1000 |
| 0.1500                    | -0.061          | 0.072           | 0.133           | -0.083          | 0.065           | 0.148           | -0.092          | 0.071           | 0.163           | -0.101          | 0.074           | 0.175           | -0.107          | 0.085           | 0.192           | -0.124          | 0.088           | 0.212           | -0.126          | 0.108           | 0.235           | 0.1500 |
| 0.2000                    | -0.065          | 0.056           | 0.121           | -0.079          | 0.058           | 0.137           | -0.092          | 0.102           | 0.159           | -0.100          |                 |                 | -0.105          | 0.072           | 0.177           | -0.116          | 0.078           | 0.194           | -0.137          | 0.096           | 0.234           | 0.2000 |
| 0.3000                    | -0.062          | 0.039           | 0.101           | -0.067          | 0.059           | 0.126           | -0.082          | 0.045           | 0.127           |                 |                 |                 | -0.103          | 0.055           | 0.158           | -0.126          | 0.060           | 0.186           | -0.120          | 0.079           | 0.199           | 0.3000 |
| 0.4000                    | -0.067          | 0.032           | 0.099           | -0.069          | 0.033           | 0.102           | -0.073          | 0.032           | 0.105           |                 |                 |                 | -0.093          | 0.048           | 0.141           | -0.121          | 0.050           | 0.171           | -0.137          | 0.064           | 0.201           | 0.4000 |
| 0.5000                    | -0.067          | 0.028           | 0.095           | -0.068          | 0.027           | 0.095           | -0.070          | 0.028           | 0.098           |                 |                 |                 | -0.081          | 0.041           | 0.122           | -0.125          | 0.039           | 0.164           | -0.141          | 0.056           | 0.197           | 0.5000 |
| 0.6000                    |                 | 0.018           |                 | -0.065          | 0.017           | 0.083           | -0.069          | 0.019           | 0.088           |                 |                 |                 | -0.077          | 0.029           | 0.105           | -0.124          | 0.028           | 0.152           | -0.142          | 0.042           | 0.184           | 0.6000 |
| 0.7000                    | -0.021          |                 |                 | -0.066          | 0.017           | 0.083           | -0.070          | 0.019           | 0.088           |                 |                 |                 | -0.072          | 0.023           | 0.095           | -0.118          | 0.022           | 0.140           | -0.140          | 0.039           | 0.178           | 0.7000 |
| 0.8000                    | -0.067          | 0.006           | 0.073           | -0.069          | 0.015           | 0.084           | -0.070          | 0.018           | 0.088           |                 |                 |                 | -0.074          | 0.021           | 0.095           | -0.110          | 0.016           | 0.126           | -0.138          | 0.036           | 0.174           | 0.8000 |
| 0.9000                    | -0.070          | 0.009           | 0.079           | -0.069          | 0.011           | 0.081           | -0.077          | 0.012           | 0.088           |                 |                 |                 | -0.             |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE III.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Concluded  
(d) BW - Concluded

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| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 2.234      α = 08.26 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.153          | 0.351           | 0.504           | -0.142          | 0.319           | 0.462           | -0.156          | 0.321           | 0.477           | -0.180          | 0.320           | 0.500           | -0.152          | 0.310           | 0.462           | -0.145          | 0.276           |                 |                 |                 |                 | 0.0000 |
| 0.0125                   | -0.140          | 0.292           | 0.433           | -0.148          | 0.279           | 0.428           | -0.157          | 0.274           | 0.430           | -0.160          | 0.281           | 0.441           | -0.160          | 0.283           | 0.443           | -0.152          | 0.286           | 0.438           | -0.166          |                 |                 | 0.0125 |
| 0.0250                   | -0.133          | 0.250           | 0.383           | -0.152          | 0.246           | 0.397           | -0.157          | 0.239           | 0.396           | -0.162          | 0.248           | 0.410           | -0.149          | 0.256           | 0.405           | -0.156          | 0.266           |                 | -0.177          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.134          | 0.212           | 0.346           | -0.149          | 0.199           | 0.348           | -0.157          | 0.206           | 0.363           |                 | 0.212           |                 | -0.158          | 0.228           | 0.386           | -0.153          | 0.236           | 0.389           | -0.173          | 0.253           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.137          | 0.180           | 0.316           | -0.147          | 0.181           | 0.327           | -0.153          | 0.177           | 0.330           | -0.153          |                 |                 | -0.159          | 0.203           | 0.362           | -0.156          | 0.212           | 0.369           | -0.172          | 0.238           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.137          | 0.171           | 0.308           | -0.145          | 0.163           | 0.308           | -0.151          | 0.163           | 0.314           | -0.151          | 0.176           | 0.327           | -0.158          | 0.187           | 0.345           | -0.157          | 0.199           | 0.356           | -0.170          | 0.217           | 0.387           | 0.1000 |
| 0.1500                   | -0.127          | 0.148           | 0.275           | -0.144          | 0.140           | 0.284           | -0.151          | 0.144           | 0.295           | -0.150          | 0.156           | 0.306           | -0.156          | 0.165           | 0.321           | -0.167          | 0.175           | 0.342           | -0.168          | 0.202           | 0.370           | 0.1500 |
| 0.2000                   | -0.103          | 0.126           | 0.229           | -0.144          | 0.129           | 0.273           | -0.151          | 0.162           | 0.314           | -0.150          |                 |                 | -0.157          | 0.148           | 0.305           | -0.154          | 0.161           | 0.315           | -0.180          | 0.188           | 0.368           | 0.2000 |
| 0.3000                   | -0.093          | 0.104           | 0.197           | -0.130          | 0.120           | 0.250           | -0.151          | 0.112           | 0.263           |                 |                 |                 | -0.153          | 0.125           | 0.278           | -0.163          | 0.138           | 0.301           | -0.156          | 0.164           | 0.320           | 0.3000 |
| 0.4000                   | -0.089          | 0.092           | 0.182           | -0.088          | 0.094           | 0.182           | -0.147          | 0.095           | 0.243           |                 |                 |                 | -0.151          | 0.111           | 0.262           | -0.160          | 0.123           | 0.283           | -0.173          | 0.147           | 0.321           | 0.4000 |
| 0.5000                   | -0.090          | 0.087           | 0.177           | -0.086          | 0.086           | 0.172           | -0.125          | 0.086           | 0.211           |                 |                 |                 | -0.148          | 0.100           | 0.248           | -0.163          | 0.110           | 0.273           | -0.177          | 0.137           | 0.313           | 0.5000 |
| 0.6000                   |                 | 0.072           |                 | -0.085          | 0.071           | 0.156           | -0.102          | 0.074           | 0.176           |                 |                 |                 | -0.143          | 0.088           | 0.231           | -0.164          | 0.095           | 0.260           | -0.175          | 0.121           | 0.296           | 0.6000 |
| 0.7000                   | -0.039          |                 |                 | -0.088          | 0.069           | 0.157           | -0.090          | 0.072           | 0.162           |                 |                 |                 | -0.137          | 0.079           | 0.216           | -0.164          | 0.088           | 0.250           | -0.171          | 0.117           | 0.289           | 0.7000 |
| 0.8000                   | -0.088          | 0.058           | 0.145           | -0.091          | 0.065           | 0.157           | -0.092          | 0.069           | 0.161           |                 |                 |                 | -0.134          | 0.072           | 0.206           | -0.158          | 0.077           | 0.236           | -0.168          | 0.112           | 0.281           | 0.8000 |
| 0.9000                   | -0.092          | 0.061           | 0.153           | -0.090          | 0.063           | 0.153           | -0.101          | 0.064           | 0.164           |                 |                 |                 | -0.130          | 0.065           | 0.195           | -0.152          | 0.069           | 0.221           | -0.165          | 0.114           | 0.279           | 0.9000 |
| 1.0000                   | -0.051          | 0.072           | 0.123           | -0.084          | 0.063           | 0.147           | -0.116          | 0.055           | 0.172           |                 |                 |                 | -0.124          | 0.057           | 0.181           | -0.141          | 0.064           | 0.205           | -0.162          | 0.122           | 0.284           | 1.0000 |
| M = 2.232      α = 12.24 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.156          | 0.374           | 0.529           | -0.144          | 0.358           | 0.502           | -0.153          | 0.341           | 0.494           | -0.176          | 0.332           | 0.509           | -0.153          | 0.335           | 0.480           | -0.137          | 0.333           |                 |                 |                 |                 | 0.0000 |
| 0.0125                   | -0.152          | 0.353           | 0.505           | -0.150          | 0.336           | 0.486           | -0.156          | 0.326           | 0.482           | -0.166          | 0.334           | 0.500           | -0.162          | 0.338           | 0.499           | -0.153          | 0.336           | 0.488           | -0.158          |                 |                 | 0.0125 |
| 0.0250                   | -0.150          | 0.333           | 0.483           | -0.154          | 0.316           | 0.470           | -0.159          | 0.311           | 0.470           | -0.167          | 0.321           | 0.488           | -0.154          | 0.334           | 0.488           |                 |                 |                 | -0.170          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.151          | 0.296           | 0.447           | -0.159          | 0.279           | 0.437           | -0.160          | 0.288           | 0.448           |                 | 0.292           |                 | -0.159          | 0.301           | 0.460           | -0.154          | 0.314           | 0.468           | -0.168          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.153          | 0.259           | 0.412           | -0.159          | 0.258           | 0.418           | -0.161          | 0.256           | 0.418           | -0.162          |                 |                 | -0.160          | 0.289           | 0.449           | -0.157          | 0.294           | 0.452           | -0.169          | 0.308           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.155          | 0.245           | 0.400           | -0.158          | 0.236           | 0.394           | -0.161          | 0.244           | 0.405           | -0.162          | 0.260           | 0.422           | -0.162          | 0.271           | 0.433           | -0.159          | 0.284           | 0.442           | -0.167          | 0.292           | 0.459           | 0.1000 |
| 0.1500                   | -0.156          | 0.219           | 0.375           | -0.156          | 0.215           | 0.370           | -0.162          | 0.223           | 0.385           | -0.162          | 0.236           | 0.398           | -0.160          | 0.241           | 0.402           | -0.169          | 0.263           | 0.442           | -0.166          | 0.277           | 0.443           | 0.1500 |
| 0.2000                   | -0.151          | 0.194           | 0.345           | -0.154          | 0.210           | 0.364           | -0.163          | 0.236           | 0.399           | -0.163          |                 |                 | -0.162          | 0.218           | 0.381           | -0.158          | 0.246           | 0.403           | -0.179          | 0.266           | 0.445           | 0.2000 |
| 0.3000                   | -0.120          | 0.173           | 0.293           | -0.160          | 0.190           | 0.351           | -0.164          | 0.188           | 0.352           |                 |                 |                 | -0.161          | 0.197           | 0.358           | -0.168          | 0.217           | 0.385           | -0.157          | 0.250           | 0.407           | 0.3000 |
| 0.4000                   | -0.108          | 0.165           | 0.272           | -0.150          | 0.172           | 0.322           | -0.167          | 0.173           | 0.339           |                 |                 |                 | -0.160          | 0.186           | 0.346           | -0.164          | 0.200           | 0.364           | -0.173          | 0.233           | 0.407           | 0.4000 |
| 0.5000                   | -0.107          | 0.151           | 0.258           | -0.121          | 0.150           | 0.270           | -0.164          | 0.158           | 0.322           |                 |                 |                 | -0.162          | 0.176           | 0.338           | -0.169          | 0.184           | 0.352           | -0.178          | 0.222           | 0.400           | 0.5000 |
| 0.6000                   |                 | 0.136           |                 | -0.106          | 0.138           | 0.244           | -0.159          | 0.144           | 0.302           |                 |                 |                 | -0.163          | 0.159           | 0.322           | -0.169          | 0.168           | 0.336           | -0.178          | 0.202           | 0.379           | 0.6000 |
| 0.7000                   | -0.055          |                 |                 | -0.105          | 0.136           | 0.241           | -0.144          | 0.139           | 0.283           |                 |                 |                 | -0.160          | 0.145           | 0.305           | -0.166          | 0.157           | 0.323           | -0.175          | 0.194           | 0.369           | 0.7000 |
| 0.8000                   | -0.100          | 0.116           | 0.216           | -0.107          | 0.127           | 0.235           | -0.125          | 0.133           | 0.258           |                 |                 |                 | -0.163          | 0.139           | 0.302           | -0.167          | 0.144           | 0.311           | -0.172          | 0.184           | 0.355           | 0.8000 |
| 0.9000                   | -0.105          | 0.122           | 0.227           | -0.104          | 0.128           | 0.232           | -0.118          | 0.127           | 0.245           |                 |                 |                 | -0.164          | 0.133           | 0.297           | -0.166          | 0.133           | 0.298           | -0.168          | 0.180           | 0.348           | 0.9000 |
| 1.0000                   | -0.071          | 0.139           | 0.210           | -0.095          | 0.140           | 0.235           | -0.124          | 0.120           | 0.244           |                 |                 |                 | -0.163          | 0.129           | 0.292           | -0.162          | 0.123           | 0.286           | -0.163          | 0.184           | 0.347           | 1.0000 |
| M = 2.232      α = 16.22 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.191          | 0.387           | 0.578           | -0.182          | 0.376           | 0.558           | -0.183          | 0.366           | 0.550           | -0.216          | 0.365           | 0.581           | -0.177          | 0.346           | 0.523           | -0.161          | 0.364           |                 |                 |                 |                 | 0.0000 |
| 0.0125                   | -0.187          | 0.412           | 0.599           | -0.184          | 0.377           | 0.561           | -0.187          | 0.374           | 0.560           | -0.190          | 0.378           | 0.567           | -0.176          | 0.378           | 0.554           | -0.180          |                 |                 |                 |                 | 0.0125          |        |
| 0.0250                   | -0.184          | 0.418           | 0.603           | -0.186          | 0.372           | 0.558           | -0.189          | 0.375           | 0.563           | -0.190          | 0.389           | 0.579           | -0.177          | 0.392           | 0.568           |                 |                 |                 | -0.191          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.183          | 0.377           | 0.560           | -0.189          | 0.344           | 0.533           | -0.189          | 0.357           | 0.546           |                 | 0.373           |                 | -0.183          | 0.372           | 0.555           | -0.176          | 0.391           | 0.567           | -0.187          | 0.386           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.185          | 0.336           | 0.521           | -0.190          | 0.332           | 0.521           | -0.189          | 0.339           | 0.528           | -0.184          |                 |                 | -0.185          | 0.362           | 0.547           | -0.179          | 0.379           | 0.557           | -0.186          | 0.385           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.186          | 0.324           | 0.510           | -0.187          | 0.313           | 0.500           | -0.189          | 0.335           | 0.524           | -0.184          | 0.337           | 0.521           | -0.186          | 0.353           | 0.539           | -0.179          | 0.369           | 0.548           | -0.185          | 0.376           | 0.561           | 0.1000 |
| 0.1500                   | -0.188          | 0.290           | 0.478           | -0.186          | 0.302           | 0.487           | -0.191          | 0.306           | 0.497           | -0.185          | 0.318           | 0.502           | -0.188          | 0.331           | 0.519           | -0.190          | 0.349           | 0.539           | -0.183          | 0.366           | 0.548           | 0.1500 |
| 0.2000                   | -0.180          | 0.270           | 0.450           | -0.186          | 0.295           | 0.481           | -0.191          | 0.315           | 0.505           | -0.186          |                 |                 | -0.186          | 0.317           | 0.502           | -0.177          | 0.327           | 0.504           | -0.196          | 0.358           | 0.553           | 0.2000 |
| 0.3000                   | -0.154          | 0.255           | 0.408           | -0.189          | 0.275           | 0.463           | -0.190          | 0.275           | 0.465           |                 |                 |                 | -0.188          | 0.287           | 0.475           | -0.190          | 0.298           | 0.488           | -0.172          | 0.338           | 0.510           | 0.3000 |
| 0.4000                   | -0.138          | 0.245           | 0.383           | -0.180          | 0.249           | 0.429           | -0.192          | 0.252           | 0.445           |                 |                 |                 | -0.188          | 0.278           | 0.464           | -0.187          | 0.279           | 0.466           | -0.191          | 0.315           | 0.505           | 0.4000 |
| 0.5000                   | -0.193          | 0.219           | 0.352           | -0.162          | 0.225           | 0.387           | -0.189          | 0.238           | 0.427           |                 |                 |                 | -0.188          | 0.252           | 0.439           | -0.190          | 0.261           | 0.452           | -0.194          | 0.301           | 0.495           | 0.5000 |
| 0.6000                   |                 | 0.220           |                 | -0.147          | 0.219           | 0.366           | -0.184          | 0.229           | 0.413           |                 |                 |                 | -0.188          | 0.235           | 0.424           | -0.192          | 0.245           | 0.437           | -0.194          | 0.280           | 0.474           | 0.6000 |
| 0.7000                   | -0.073          |                 |                 | -0.143          | 0.207           | 0.350           | -0.176          | 0.215           | 0.391           |                 |                 |                 | -0.187          | 0.226           | 0.412           | -0.190          | 0.239           | 0.429           | -0.192          | 0.272           | 0.464           | 0.7000 |
| 0.8000                   | -0.128          | 0.188           | 0.316           | -0.139          | 0.203           | 0.343           | -0.162          | 0.212           | 0.374           |                 |                 |                 | -0.187          | 0.219           | 0.405           | -0.191          | 0.227           | 0.418           | -0.188          | 0.265           | 0.453           | 0.8000 |
| 0.9000                   | -0.160          | 0.194           | 0.334           | -0.133          | 0.200           | 0.333           | -0.158          | 0.202           | 0.360           |                 |                 |                 | -0.188          | 0.208           | 0.396           | -0.190          | 0.214.          |                 |                 |                 |                 |        |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION  
(a) BVW

| x/c                       | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 0.701      α = -04.28 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.178          | 0.063           | 0.240           | -0.217          | 0.012           | 0.229           | -0.230          | 0.023           | 0.253           | -0.219          | 0.040           | 0.259           | -0.298          | -0.127          | 0.171           | 0.0000 |
| 0.0250                    | -0.168          | 0.018           | 0.186           | -0.215          | -0.033          | 0.182           | -0.227          | -0.017          | 0.211           | -0.219          | -0.008          | 0.212           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.162          | -0.020          | 0.142           | -0.208          | -0.063          | 0.145           | -0.219          | -0.044          | 0.175           | -0.212          | -0.039          | 0.173           | -0.227          | -0.074          | 0.154           | 0.0500 |
| 0.1000                    | -0.159          | -0.073          | 0.086           | -0.178          | -0.077          | 0.102           | -0.182          | -0.061          | 0.121           | -0.173          | -0.052          | 0.121           | -0.179          | -0.051          | 0.128           | 0.1000 |
| 0.1500                    | -0.145          | -0.075          | 0.070           | -0.159          | -0.083          | 0.076           | -0.156          | -0.066          | 0.090           | -0.155          | -0.055          | 0.100           | -0.153          | -0.060          | 0.093           | 0.1500 |
| 0.2000                    | -0.142          | -0.080          | 0.062           | -0.150          | -0.083          | 0.066           | -0.148          | -0.071          | 0.077           | -0.137          | -0.063          | 0.074           | -0.138          | -0.065          | 0.072           | 0.2000 |
| 0.3000                    | -0.138          | -0.095          | 0.043           | -0.127          | -0.085          | 0.042           | -0.132          | -0.068          | 0.064           | -0.111          | -0.067          | 0.045           | -0.114          | -0.069          | 0.045           | 0.3000 |
| 0.4000                    | -0.131          | -0.092          | 0.039           | -0.109          | -0.079          | 0.030           | -0.111          | -0.063          | 0.047           | -0.097          | -0.063          | 0.033           | -0.103          | -0.062          | 0.041           | 0.4000 |
| 0.5000                    | -0.102          | -0.075          | 0.027           | -0.090          | -0.066          | 0.024           | -0.094          | -0.048          | 0.046           | -0.084          | -0.058          | 0.026           | -0.094          | -0.055          | 0.038           | 0.5000 |
| 0.6000                    | -0.082          | -0.054          | 0.029           | -0.060          | -0.052          | 0.008           | -0.070          | -0.045          | 0.025           | -0.067          | -0.054          | 0.013           | -0.080          | -0.049          | 0.030           | 0.6000 |
| 0.7000                    | -0.029          | -0.031          | -0.003          | -0.043          | -0.046          | -0.003          | -0.048          | -0.039          | -0.039          | -0.051          | -0.012          | -0.069          | -0.037          | 0.031           | 0.7000          |        |
| 0.8000                    | -0.006          | -0.023          | -0.017          | -0.023          | -0.043          | -0.020          | -0.040          | -0.045          | -0.005          | -0.025          | -0.034          | -0.009          |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.055          | -0.048          | 0.007           | 0.027           | -0.048          | -0.076          | -0.037          | -0.022          | 0.015           | -0.040          | 0.041           | 0.081           | -0.053          | 0.039           | 0.091           | 1.0000 |
| M = 0.698      α = -00.20 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.016           | -0.220          | -0.236          | 0.020           | -0.340          | -0.360          | 0.100           | -0.285          | -0.385          | 0.089           | -0.339          | -0.429          | 0.001           | -0.313          | -0.313          | 0.0000 |
| 0.0250                    | -0.029          | -0.218          | -0.189          | -0.045          | -0.292          | -0.247          | 0.008           | -0.261          | -0.269          | 0.004           | -0.258          | -0.261          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.063          | -0.216          | -0.153          | -0.087          | -0.255          | -0.168          | -0.051          | -0.236          | -0.185          | -0.050          | -0.200          | -0.150          | -0.047          | -0.214          | -0.167          | 0.0500 |
| 0.1000                    | -0.096          | -0.214          | -0.118          | -0.101          | -0.215          | -0.114          | -0.071          | -0.181          | -0.109          | -0.066          | -0.158          | -0.093          | -0.069          | -0.157          | -0.087          | 0.1000 |
| 0.1500                    | -0.113          | -0.189          | -0.076          | -0.107          | -0.197          | -0.089          | -0.077          | -0.156          | -0.079          | -0.069          | -0.142          | -0.073          | -0.065          | -0.139          | -0.074          | 0.1500 |
| 0.2000                    | -0.121          | -0.179          | -0.058          | -0.107          | -0.183          | -0.076          | -0.084          | -0.144          | -0.060          | -0.067          | -0.130          | -0.063          | -0.062          | -0.125          | -0.062          | 0.2000 |
| 0.3000                    | -0.122          | -0.175          | -0.054          | -0.100          | -0.163          | -0.064          | -0.079          | -0.121          | -0.043          | -0.058          | -0.112          | -0.055          | -0.060          | -0.111          | -0.051          | 0.3000 |
| 0.4000                    | -0.111          | -0.146          | -0.035          | -0.082          | -0.134          | -0.052          | -0.069          | -0.104          | -0.035          | -0.053          | -0.102          | -0.048          | -0.061          | -0.093          | -0.032          | 0.4000 |
| 0.5000                    | -0.080          | -0.127          | -0.048          | -0.068          | -0.113          | -0.045          | -0.059          | -0.073          | -0.034          | -0.047          | -0.083          | -0.036          | -0.057          | -0.074          | -0.017          | 0.5000 |
| 0.6000                    | -0.044          | -0.075          | -0.031          | -0.044          | -0.082          | -0.038          | -0.034          | -0.059          | -0.025          | -0.039          | -0.074          | -0.035          | -0.049          | -0.051          | -0.002          | 0.6000 |
| 0.7000                    | -0.014          | -0.049          | -0.035          | -0.028          | -0.056          | -0.028          | -0.063          | -0.026          | -0.026          | -0.061          | -0.035          | -0.046          | -0.049          | -0.003          | 0.7000          |        |
| 0.8000                    | -0.003          | -0.032          | -0.029          | -0.003          | -0.047          | -0.044          | -0.013          | -0.048          | -0.035          | -0.021          | -0.039          | -0.018          |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.035          | -0.026          | 0.009           | 0.076           | -0.075          | -0.151          | -0.032          | 0.040           | 0.072           | -0.030          | 0.033           | 0.063           | -0.059          | -0.165          | -0.106          | 1.0000 |
| M = 0.697      α = 03.78  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.097           | -0.554          | -0.651          | 0.119           | -0.537          | -0.657          | 0.273           | -0.550          | -0.822          | 0.216           | -0.585          | -0.801          | 0.165           | -1.048          | -1.212          | 0.0000 |
| 0.0250                    | 0.010           | -0.446          | -0.456          | 0.029           | -0.507          | -0.536          | 0.119           | -0.514          | -0.633          | 0.109           | -0.529          | -0.639          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.052          | -0.373          | -0.321          | -0.031          | -0.464          | -0.433          | 0.020           | -0.451          | -0.471          | 0.037           | -0.453          | -0.490          | 0.057           | -0.489          | -0.546          | 0.0500 |
| 0.1000                    | -0.102          | -0.332          | -0.230          | -0.062          | -0.339          | -0.276          | -0.016          | -0.247          | -0.231          | -0.005          | -0.237          | -0.232          | -0.001          | -0.211          | -0.210          | 0.1000 |
| 0.1500                    | -0.126          | -0.276          | -0.150          | -0.078          | -0.260          | -0.183          | -0.033          | -0.229          | -0.196          | -0.023          | -0.208          | -0.185          | -0.011          | -0.215          | -0.204          | 0.1500 |
| 0.2000                    | -0.123          | -0.251          | -0.128          | -0.084          | -0.244          | -0.160          | -0.043          | -0.210          | -0.167          | -0.029          | -0.192          | -0.162          | -0.020          | -0.181          | -0.161          | 0.2000 |
| 0.3000                    | -0.130          | -0.238          | -0.108          | -0.085          | -0.215          | -0.131          | -0.047          | -0.166          | -0.117          | -0.032          | -0.161          | -0.129          | -0.027          | -0.152          | -0.125          | 0.3000 |
| 0.4000                    | -0.110          | -0.187          | -0.077          | -0.072          | -0.161          | -0.089          | -0.045          | -0.141          | -0.096          | -0.039          | -0.134          | -0.095          | -0.036          | -0.126          | -0.090          | 0.4000 |
| 0.5000                    | -0.076          | -0.132          | -0.056          | -0.055          | -0.127          | -0.072          | -0.040          | -0.101          | -0.061          | -0.035          | -0.112          | -0.077          | -0.039          | -0.098          | -0.059          | 0.5000 |
| 0.6000                    | -0.040          | -0.095          | -0.054          | -0.041          | -0.073          | -0.032          | -0.025          | -0.087          | -0.062          | -0.030          | -0.098          | -0.068          | -0.038          | -0.068          | -0.030          | 0.6000 |
| 0.7000                    | -0.011          | -0.052          | -0.041          | -0.024          | -0.065          | -0.041          | -0.008          | -0.084          | -0.022          | -0.079          | -0.057          | -0.040          | -0.059          | -0.018          | 0.7000          |        |
| 0.8000                    | 0.005           | -0.026          | -0.031          | 0.002           | -0.054          | -0.056          | -0.014          | -0.066          | -0.046          | -0.017          | -0.053          | -0.036          |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.009          | -0.025          | -0.016          | 0.081           | -0.023          | -0.105          | -0.027          | 0.046           | 0.073           | -0.019          | 0.020           | 0.039           | -0.076          | -0.159          | -0.083          | 1.0000 |
| M = 0.701      α = 07.66  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.530          | -0.030          | 0.500           | 0.009           | -0.587          | -0.596          | 0.261           | -0.630          | -0.891          | 0.277           | -0.881          | -1.158          | 0.213           | -1.062          | -1.275          | 0.0000 |
| 0.0250                    | -0.448          | -0.120          | 0.328           | -0.091          | -0.478          | -0.387          | 0.105           | -0.591          | -0.696          | 0.143           | -0.708          | -0.851          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.386          | -0.189          | 0.197           | -0.154          | -0.401          | -0.248          | 0.003           | -0.523          | -0.526          | 0.053           | -0.557          | -0.610          | 0.088           | -0.652          | -0.739          | 0.0500 |
| 0.1000                    | -0.322          | -0.264          | 0.058           | -0.168          | -0.346          | -0.178          | -0.037          | -0.297          | -0.259          | 0.006           | -0.321          | -0.328          | 0.018           | -0.397          | -0.415          | 0.1000 |
| 0.1500                    | -0.262          | -0.267          | -0.005          | -0.165          | -0.297          | -0.132          | -0.063          | -0.270          | -0.207          | -0.016          | -0.262          | -0.247          | 0.005           | -0.297          | -0.302          | 0.1500 |
| 0.2000                    | -0.224          | -0.266          | -0.042          | -0.161          | -0.286          | -0.082          | -0.072          | -0.196          | -0.171          | -0.030          | -0.238          | -0.208          | -0.007          | -0.234          | -0.227          | 0.2000 |
| 0.3000                    | -0.189          | -0.260          | -0.071          | -0.144          | -0.226          | -0.082          | -0.072          | -0.194          | -0.122          | -0.033          | -0.199          | -0.166          | -0.023          | -0.191          | -0.169          | 0.3000 |
| 0.4000                    | -0.127          | -0.215          | -0.088          | -0.115          | -0.186          | -0.071          | -0.068          | -0.170          | -0.101          | -0.044          | -0.168          | -0.124          | -0.035          | -0.162          | -0.127          | 0.4000 |
| 0.5000                    | -0.067          | -0.157          | -0.091          | -0.084          | -0.151          | -0.067          | -0.060          | -0.123          | -0.063          | -0.044          | -0.140          | -0.095          | -0.042          | -0.128          | -0.086          | 0.5000 |
| 0.6000                    | -0.030          | -0.096          | -0.066          | -0.054          | -0.122          | -0.068          | -0.046          | -0.108          | -0.062          | -0.042          | -0.123          | -0.081          | -0.044          | -0.091          | -0.047          | 0.6000 |
| 0.7000                    | 0.002           | -0.060          | -0.062          | -0.034          | -0.092          | -0.059          | -0.031          | -0.105          | -0.033          | -0.033          | -0.101          | -0.068          | -0.050          | -0.076          | -0.027          | 0.7000 |
| 0.8000                    | 0.014           | -0.037          | -0.051          | -0.025          | -0.072          | -0.047          | -0.031          | -0.082          | -0.051          | -0.032          | -0.074          | -0.043          |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.020          | -0.032          | -0.012          | -0.038          | -0.058          | -0.020          | -0.032          | 0.026           | 0.058           | -0.051          | -0.004          | 0.047           | -0.091          | -0.169          | -0.078          | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $0^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                      | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c   |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
|                          | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |       |
| M = 0.697      α = 11.79 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |       |
| 0.0000                   | -0.900          | 0.644           | 1.545           | -0.192          | -0.796          | -0.604          | 0.290           | -1.192          | -1.482          | 0.258           | -0.930          | -1.188          | 0.239           | -0.700          | -0.939          | 0.000 |
| 0.0250                   | -0.933          | 0.462           | 1.395           | -0.343          | -0.670          | -0.327          | 0.038           | -1.148          | -1.186          | 0.117           | -0.911          | -1.028          |                 |                 |                 | 0.025 |
| 0.0500                   | -0.961          | 0.293           | 1.254           | -0.442          | -0.579          | -0.137          | -0.132          | -1.048          | -0.916          | 0.016           | -0.885          | -0.901          | 0.098           | -0.683          | -0.781          | 0.050 |
| 0.1000                   | -1.002          |                 | 1.002           | -0.487          | -0.503          | -0.016          | -0.226          | -0.682          | -0.456          | -0.066          | -0.809          | -0.743          | 0.016           | -0.667          | -0.683          | 0.100 |
| 0.1500                   | -0.916          | -0.123          | 0.793           | -0.513          | -0.451          | 0.061           | -0.278          | -0.523          | -0.246          | -0.107          | -0.699          | -0.592          | -0.007          | -0.652          | -0.646          | 0.150 |
| 0.2000                   | -0.770          | -0.179          | 0.591           | -0.544          | -0.372          | 0.167           | -0.338          | -0.318          | -0.020          | -0.138          | -0.371          | -0.233          | -0.043          | -0.507          | -0.464          | 0.200 |
| 0.3000                   | -0.558          | -0.284          | 0.274           | -0.539          | -0.372          | 0.167           | -0.338          | -0.318          | 0.056           | -0.148          | -0.265          | -0.117          | -0.054          | -0.374          | -0.319          | 0.300 |
| 0.4000                   | -0.535          | -0.304          | 0.231           | -0.513          | -0.314          | 0.199           | -0.333          | -0.277          | 0.056           | -0.148          | -0.265          | -0.117          | -0.054          | -0.374          | -0.319          | 0.400 |
| 0.5000                   | -0.510          | -0.262          | 0.248           | -0.477          | -0.267          | 0.210           | -0.311          | -0.220          | 0.091           | -0.139          | -0.211          | -0.072          | -0.058          | -0.249          | -0.191          | 0.500 |
| 0.6000                   | -0.490          | -0.215          | 0.275           | -0.424          | -0.209          | 0.214           | -0.272          | -0.199          | 0.073           | -0.120          | -0.188          | -0.068          | -0.056          | -0.148          | -0.092          | 0.600 |
| 0.7000                   | -0.388          | -0.171          | 0.217           | -0.363          | -0.192          | 0.171           |                 | -0.191          |                 | -0.095          | -0.153          | -0.058          | -0.062          | -0.120          | -0.058          | 0.700 |
| 0.8000                   | -0.319          | -0.144          | 0.175           | -0.293          | -0.178          | 0.115           | -0.154          | -0.166          | -0.012          | -0.080          | -0.118          | -0.039          |                 |                 |                 | 0.800 |
| 1.0000                   | -0.279          | -0.139          | 0.140           | -0.121          | -0.158          | -0.037          | 0.018           | -0.066          | -0.084          | -0.074          | -0.047          | 0.027           | -0.126          | -0.477          | -0.351          | 1.000 |
| M = 0.701      α = 15.76 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |       |
| 0.0000                   | -0.649          | -0.346          | 0.303           | -0.700          | -0.743          | -0.042          | -0.717          | -0.710          | 0.008           | -0.668          | -0.546          | 0.122           | -0.350          | -0.502          | -0.151          | 0.000 |
| 0.0250                   | -0.640          | -0.264          | 0.376           | -0.691          | -0.687          | 0.004           | -0.703          | -0.662          | 0.040           | -0.645          | -0.485          | 0.160           |                 |                 |                 | 0.025 |
| 0.0500                   | -0.635          | -0.203          | 0.432           | -0.685          | -0.647          | 0.038           | -0.692          | -0.625          | 0.067           | -0.623          | -0.444          | 0.179           | -0.327          | -0.431          | -0.104          | 0.050 |
| 0.1000                   | -0.630          | -0.149          | 0.480           | -0.683          | -0.612          | 0.070           | -0.681          | -0.579          | 0.102           | -0.584          | -0.425          | 0.159           | -0.306          | -0.388          | -0.082          | 0.100 |
| 0.1500                   | -0.650          | -0.160          | 0.490           | -0.681          | -0.543          | 0.139           | -0.672          | -0.554          | 0.119           | -0.560          | -0.409          | 0.151           | -0.288          | -0.373          | -0.084          | 0.150 |
| 0.2000                   | -0.653          | -0.177          | 0.476           | -0.684          | -0.511          | 0.172           | -0.669          | -0.524          | 0.145           | -0.532          | -0.398          | 0.134           | -0.278          | -0.354          | -0.076          | 0.200 |
| 0.3000                   | -0.670          | -0.224          | 0.446           | -0.689          | -0.445          | 0.245           | -0.651          | -0.481          | 0.170           | -0.483          | -0.380          | 0.104           | -0.248          | -0.329          | -0.081          | 0.300 |
| 0.4000                   | -0.673          | -0.234          | 0.439           | -0.690          | -0.412          | 0.278           | -0.629          | -0.450          | 0.179           | -0.436          | -0.380          | 0.036           | -0.197          | -0.287          | -0.090          | 0.400 |
| 0.5000                   | -0.673          | -0.225          | 0.448           | -0.678          | -0.338          | 0.340           | -0.598          | -0.410          | 0.188           | -0.390          | -0.355          | 0.036           | -0.197          | -0.287          | -0.090          | 0.500 |
| 0.6000                   | -0.662          | -0.197          | 0.464           | -0.649          | -0.300          | 0.349           | -0.552          | -0.378          | 0.174           | -0.342          | -0.346          | -0.004          | -0.173          | -0.263          | -0.090          | 0.600 |
| 0.7000                   | -0.645          | -0.178          | 0.467           | -0.611          | -0.289          | 0.322           |                 | -0.348          |                 | -0.292          | -0.312          | -0.020          | -0.164          | -0.250          | -0.087          | 0.700 |
| 0.8000                   | -0.594          | -0.177          | 0.418           | -0.550          | -0.266          | 0.284           | -0.414          | -0.321          | 0.093           | -0.246          | -0.289          | -0.043          |                 |                 |                 | 0.800 |
| 1.0000                   | -0.390          | -0.224          | 0.166           | -0.355          | -0.179          | 0.176           | -0.217          | -0.275          | -0.058          | -0.167          | -0.276          | -0.109          | -0.228          | -0.289          | -0.061          | 1.000 |
| M = 0.904      α = 03.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |       |
| 0.0000                   | 0.046           | -0.489          | -0.535          | 0.040           | -0.613          | -0.653          | 0.097           | -0.710          | -0.808          | 0.240           | -0.496          | -0.736          | 0.176           | -0.859          | -1.036          | 0.000 |
| 0.0250                   | -0.031          | -0.464          | -0.433          | -0.067          | -0.640          | -0.572          | 0.034           | -0.684          | -0.717          | 0.124           | -0.551          | -0.675          |                 |                 |                 | 0.025 |
| 0.0500                   | -0.087          | -0.443          | -0.356          | -0.140          | -0.643          | -0.503          | -0.011          | -0.625          | -0.614          | 0.046           | -0.542          | -0.587          | 0.068           | -0.523          | -0.591          | 0.050 |
| 0.1000                   | -0.141          | -0.418          | -0.277          | -0.184          | -0.581          | -0.397          | -0.042          | -0.414          | -0.373          | 0.002           | -0.332          | -0.334          | 0.008           | -0.315          | -0.323          | 0.100 |
| 0.1500                   | -0.184          | -0.386          | -0.203          | -0.196          | -0.414          | -0.218          | -0.054          | -0.221          | -0.167          | -0.016          | -0.229          | -0.212          | -0.005          | -0.236          | -0.231          | 0.150 |
| 0.2000                   | -0.213          | -0.386          | -0.173          | -0.191          | -0.405          | -0.214          | -0.058          | -0.210          | -0.152          | -0.026          | -0.208          | -0.182          | -0.013          | -0.200          | -0.187          | 0.200 |
| 0.3000                   | -0.242          | -0.392          | -0.150          | -0.135          | -0.261          | -0.126          | -0.048          | -0.172          | -0.125          | -0.028          | -0.174          | -0.146          | -0.023          | -0.173          | -0.149          | 0.300 |
| 0.4000                   | -0.225          | -0.370          | -0.146          | -0.088          | -0.151          | -0.063          | -0.039          | -0.147          | -0.108          | -0.036          | -0.149          | -0.113          | -0.032          | -0.147          | -0.115          | 0.400 |
| 0.5000                   | -0.118          | -0.156          | -0.039          | -0.049          | -0.110          | -0.061          | -0.038          | -0.106          | -0.068          | -0.034          | -0.126          | -0.092          | -0.034          | -0.114          | -0.080          | 0.500 |
| 0.6000                   | -0.052          | -0.085          | -0.032          | -0.018          | -0.088          | -0.070          | -0.029          | -0.094          | -0.065          | -0.027          | -0.115          | -0.088          | -0.035          | -0.083          | -0.048          | 0.600 |
| 0.7000                   | 0.001           | -0.047          | -0.047          | -0.012          | -0.076          | -0.063          |                 | -0.091          |                 | -0.019          | -0.088          | -0.069          | -0.043          | -0.069          | -0.027          | 0.700 |
| 0.8000                   | 0.018           | -0.026          | -0.044          | -0.001          | -0.067          | -0.066          | -0.009          | -0.067          | -0.057          | -0.014          | -0.055          | -0.041          |                 |                 |                 | 0.800 |
| 1.0000                   | -0.054          | -0.036          | 0.018           | 0.038           | -0.060          | -0.098          | 0.015           | 0.048           | 0.033           | -0.014          | 0.030           | 0.043           | -0.099          | -0.133          | -0.034          | 1.000 |
| M = 0.951      α = 03.87 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |       |
| 0.0000                   | -0.069          | -0.492          | -0.423          | 0.128           | -0.713          | -0.841          | 0.097           | -0.846          | -0.943          | 0.086           | -0.767          | -0.852          | 0.270           | -0.444          | -0.715          | 0.000 |
| 0.0250                   | -0.068          | -0.482          | -0.413          | -0.036          | -0.635          | -0.598          | -0.046          | -0.730          | -0.684          | -0.011          | -0.728          | -0.717          |                 |                 |                 | 0.025 |
| 0.0500                   | -0.084          | -0.468          | -0.384          | -0.147          | -0.579          | -0.432          | -0.144          | -0.656          | -0.512          | -0.065          | -0.700          | -0.635          | 0.152           | -0.398          | -0.550          | 0.050 |
| 0.1000                   | -0.164          | -0.433          | -0.269          | -0.204          | -0.533          | -0.329          | -0.204          | -0.637          | -0.434          | -0.044          | -0.676          | -0.631          | 0.083           | -0.343          | -0.426          | 0.100 |
| 0.1500                   | -0.208          | -0.388          | -0.179          | -0.232          | -0.471          | -0.239          | -0.251          | -0.437          | -0.186          | -0.010          | -0.399          | -0.388          | 0.064           | -0.279          | -0.343          | 0.150 |
| 0.2000                   | -0.230          | -0.379          | -0.149          | -0.253          | -0.430          | -0.177          | -0.249          | -0.477          | -0.227          | 0.014           | -0.211          | -0.225          | 0.051           | -0.217          | -0.267          | 0.200 |
| 0.3000                   | -0.265          | -0.402          | -0.138          | -0.296          | -0.438          | -0.142          | -0.178          | -0.457          | -0.279          | 0.036           | -0.036          | -0.072          | 0.032           | -0.156          | -0.188          | 0.300 |
| 0.4000                   | -0.295          | -0.420          | -0.125          | -0.272          | -0.486          | -0.214          | -0.021          | -0.165          | -0.144          | 0.024           | -0.044          | -0.068          | 0.017           | -0.119          | -0.136          | 0.400 |
| 0.5000                   | -0.293          | -0.421          | -0.128          | -0.192          | -0.446          | -0.053          | 0.012           | -0.002          | -0.010          | 0.020           | -0.049          | -0.070          | 0.009           | -0.093          | -0.102          | 0.500 |
| 0.6000                   | -0.217          | -0.251          | -0.034          | 0.053           | -0.034          | -0.087          | 0.026           | -0.004          | -0.030          | 0.019           | -0.057          | -0.076          | 0.003           | -0.061          | -0.063          | 0.600 |
| 0.7000                   | 0.007           | -0.071          | -0.078          | 0.041           | 0.002           | -0.039          |                 | -0.027          |                 | 0.023           | -0.043          | -0.066          | -0.010          | -0.044          | -0.034          | 0.700 |
| 0.8000                   | 0.046           | -0.018          | -0.064          | 0.039           | 0.005           | -0.034          | 0.035           | -0.018          | -0.053          | 0.021           | -0.015          | -0.036          |                 |                 |                 | 0.800 |
| 1.0000                   | -0.432          | -0.292          | 0.139           | 0.071           | -0.087          | -0.158          | 0.021           | 0.103           | 0.083           | 0.001           | 0.083           | 0.082           | -0.083          | -0.083          |                 | 1.000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                       | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 1.011      α = 03.98  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.033          | -0.415          | -0.382          | 0.015           | -0.609          | -0.623          | 0.027           | -0.721          | -0.748          | 0.003           | -0.739          | -0.742          | -0.085          | -0.644          | -0.559          | 0.0000 |
| 0.0250                    | -0.068          | -0.414          | -0.347          | -0.071          | -0.542          | -0.471          | -0.066          | -0.636          | -0.571          | -0.118          | -0.665          | -0.546          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.100          | -0.401          | -0.301          | -0.132          | -0.494          | -0.362          | -0.133          | -0.575          | -0.443          | -0.200          | -0.617          | -0.417          | -0.210          | -0.625          | -0.415          | 0.0500 |
| 0.1000                    | -0.158          | -0.339          | -0.181          | -0.178          | -0.453          | -0.275          | -0.189          | -0.523          | -0.335          | -0.243          | -0.602          | -0.359          | -0.270          | -0.609          | -0.338          | 0.1000 |
| 0.1500                    | -0.188          | -0.364          | -0.176          | -0.209          | -0.427          | -0.219          | -0.217          | -0.471          | -0.254          | -0.266          | -0.535          | -0.268          | -0.265          | -0.593          | -0.328          | 0.1500 |
| 0.2000                    | -0.202          | -0.338          | -0.136          | -0.239          | -0.393          | -0.155          | -0.260          | -0.417          | -0.157          | -0.280          | -0.421          | -0.141          | -0.243          | -0.509          | -0.267          | 0.2000 |
| 0.3000                    | -0.233          | -0.350          | -0.117          | -0.260          | -0.389          | -0.128          | -0.280          | -0.425          | -0.145          | -0.297          | -0.490          | -0.193          | -0.166          | -0.499          | -0.333          | 0.3000 |
| 0.4000                    | -0.258          | -0.369          | -0.112          | -0.286          | -0.422          | -0.135          | -0.305          | -0.477          | -0.171          | -0.238          | -0.459          | -0.221          | -0.119          | -0.427          | -0.308          | 0.4000 |
| 0.5000                    | -0.271          | -0.394          | -0.123          | -0.306          | -0.423          | -0.117          | -0.298          | -0.421          | -0.123          | -0.200          | -0.395          | -0.195          | -0.079          | -0.283          | -0.204          | 0.5000 |
| 0.6000                    | -0.301          | -0.386          | -0.085          | -0.272          | -0.396          | -0.124          | -0.218          | -0.343          | -0.125          | -0.065          | -0.238          | -0.172          | -0.069          | -0.226          | -0.157          | 0.6000 |
| 0.7000                    | -0.286          | -0.333          | -0.047          | -0.234          | -0.236          | -0.002          |                 | -0.201          |                 | -0.053          | -0.208          | -0.155          | -0.108          | -0.206          | -0.098          | 0.7000 |
| 0.8000                    | -0.107          | -0.183          | -0.076          | 0.008           | -0.158          | -0.167          | -0.075          | -0.182          | -0.107          | -0.089          | -0.205          | -0.116          |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.745           | 0.406           | -0.340          | 1.104           | -0.252          | -1.357          | 0.046           | -0.512          | -0.558          | -0.303          | -0.277          | 0.026           | -0.517          | -0.374          | 0.143           | 1.0000 |
| M = 1.049      α = 03.98  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.012          | -0.428          | -0.416          | 0.035           | -0.536          | -0.571          | 0.076           | -0.696          | -0.771          | 0.041           | -0.697          | -0.738          | -0.055          | -0.616          | -0.561          | 0.0000 |
| 0.0250                    | -0.052          | -0.399          | -0.347          | -0.057          | -0.551          | -0.494          | -0.025          | -0.611          | -0.586          | -0.075          | -0.627          | -0.552          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.086          | -0.376          | -0.289          | -0.118          | -0.541          | -0.423          | -0.100          | -0.550          | -0.450          | -0.157          | -0.584          | -0.428          | -0.178          | -0.597          | -0.420          | 0.0500 |
| 0.1000                    | -0.138          | -0.346          | -0.208          | -0.150          | -0.444          | -0.294          | -0.172          | -0.499          | -0.328          | -0.214          | -0.580          | -0.365          | -0.243          | -0.581          | -0.339          | 0.1000 |
| 0.1500                    | -0.168          | -0.315          | -0.147          | -0.183          | -0.371          | -0.188          | -0.196          | -0.451          | -0.255          | -0.235          | -0.528          | -0.294          | -0.250          | -0.569          | -0.319          | 0.1500 |
| 0.2000                    | -0.185          | -0.334          | -0.149          | -0.205          | -0.361          | -0.156          | -0.218          | -0.383          | -0.166          | -0.247          | -0.404          | -0.157          | -0.247          | -0.472          | -0.225          | 0.2000 |
| 0.3000                    | -0.204          | -0.335          | -0.130          | -0.226          | -0.364          | -0.138          | -0.247          | -0.385          | -0.138          | -0.264          | -0.429          | -0.165          | -0.191          | -0.456          | -0.265          | 0.3000 |
| 0.4000                    | -0.226          | -0.348          | -0.123          | -0.264          | -0.378          | -0.113          | -0.272          | -0.432          | -0.160          | -0.262          | -0.462          | -0.221          | -0.135          | -0.433          | -0.298          | 0.4000 |
| 0.5000                    | -0.249          | -0.366          | -0.118          | -0.273          | -0.395          | -0.123          | -0.282          | -0.405          | -0.123          | -0.189          | -0.395          | -0.206          | -0.099          | -0.296          | -0.197          | 0.5000 |
| 0.6000                    | -0.272          | -0.341          | -0.069          | -0.251          | -0.367          | -0.116          | -0.222          | -0.350          | -0.128          | -0.133          | -0.238          | -0.105          | -0.012          | -0.180          | -0.168          | 0.6000 |
| 0.7000                    | -0.260          | -0.292          | -0.032          | -0.219          | -0.241          | -0.023          |                 | -0.185          |                 | -0.011          | -0.164          | -0.153          | -0.058          | -0.161          | -0.103          | 0.7000 |
| 0.8000                    | -0.117          | -0.152          | -0.036          | 0.010           | -0.136          | -0.146          | -0.039          | -0.136          | -0.097          | -0.056          | -0.158          | -0.102          |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.568           | 0.399           | -0.169          | 1.058           | 0.012           | -1.046          | 0.226           | -0.383          | -0.609          | -0.645          | -0.348          | 0.296           | -0.999          | -0.688          | 0.311           | 1.0000 |
| M = 1.103      α = 03.98  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.026           | -0.336          | -0.361          | 0.075           | -0.510          | -0.585          | 0.135           | -0.618          | -0.753          | 0.084           | -0.648          | -0.732          | -0.006          | -0.528          | -0.521          | 0.0000 |
| 0.0250                    | -0.001          | -0.353          | -0.351          | -0.007          | -0.492          | -0.486          | 0.013           | -0.540          | -0.554          | -0.017          | -0.566          | -0.549          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.030          | -0.351          | -0.321          | -0.064          | -0.469          | -0.405          | -0.067          | -0.484          | -0.418          | -0.087          | -0.512          | -0.425          | -0.109          | -0.505          | -0.396          | 0.0500 |
| 0.1000                    | -0.096          | -0.293          | -0.197          | -0.106          | -0.410          | -0.305          | -0.104          | -0.439          | -0.335          | -0.139          | -0.494          | -0.355          | -0.166          | -0.486          | -0.321          | 0.1000 |
| 0.1500                    | -0.117          | -0.269          | -0.152          | -0.125          | -0.368          | -0.243          | -0.144          | -0.408          | -0.264          | -0.176          | -0.451          | -0.276          | -0.175          | -0.472          | -0.297          | 0.1500 |
| 0.2000                    | -0.139          | -0.254          | -0.114          | -0.153          | -0.318          | -0.164          | -0.165          | -0.332          | -0.167          | -0.184          | -0.302          | -0.117          | -0.184          | -0.384          | -0.200          | 0.2000 |
| 0.3000                    | -0.152          | -0.270          | -0.118          | -0.185          | -0.304          | -0.119          | -0.198          | -0.319          | -0.120          | -0.192          | -0.329          | -0.138          | -0.159          | -0.358          | -0.198          | 0.3000 |
| 0.4000                    | -0.175          | -0.286          | -0.111          | -0.218          | -0.314          | -0.095          | -0.208          | -0.341          | -0.133          | -0.203          | -0.373          | -0.170          | -0.098          | -0.381          | -0.283          | 0.4000 |
| 0.5000                    | -0.216          | -0.309          | -0.093          | -0.215          | -0.312          | -0.097          | -0.225          | -0.325          | -0.101          | -0.162          | -0.346          | -0.204          | -0.072          | -0.305          | -0.232          | 0.5000 |
| 0.6000                    | -0.217          | -0.276          | -0.059          | -0.210          | -0.304          | -0.094          | -0.196          | -0.304          | -0.107          | -0.118          | -0.283          | -0.165          | 0.055           | -0.172          | -0.227          | 0.6000 |
| 0.7000                    | -0.210          | -0.257          | -0.047          | -0.176          | -0.236          | -0.060          |                 | -0.178          |                 | 0.066           | -0.117          | -0.183          | 0.034           | -0.105          | -0.139          | 0.7000 |
| 0.8000                    | -0.037          | -0.118          | -0.081          | 0.002           | -0.114          | -0.116          | 0.033           | -0.076          | -0.109          | 0.029           | -0.079          | -0.108          |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.802           | 0.515           | -0.287          | 0.787           | 0.290           | -0.497          | 0.492           | 0.060           | -0.432          | -0.711          | -0.391          | 0.319           | -0.926          | -0.297          | 0.628           | 1.0000 |
| M = 1.302      α = -04.18 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.011          | 0.139           | 0.149           | -0.023          | 0.047           | 0.070           | -0.025          | 0.123           | 0.148           | -0.045          | 0.035           | 0.080           | -0.103          | -0.108          | -0.004          | 0.0000 |
| 0.0250                    | -0.012          | 0.083           | 0.096           | -0.071          | 0.022           | 0.093           | -0.094          | 0.050           | 0.144           | -0.107          | -0.005          | 0.102           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.019          | 0.044           | 0.063           | -0.095          | 0.004           | 0.099           | -0.131          | 0.001           | 0.131           | -0.144          | -0.032          | 0.112           | -0.163          | -0.073          | 0.090           | 0.0500 |
| 0.1000                    | -0.045          | 0.015           | 0.060           | -0.073          | -0.014          | 0.059           | -0.106          | -0.028          | 0.078           | -0.136          | -0.042          | 0.095           | -0.184          | -0.057          | 0.127           | 0.1000 |
| 0.1500                    | -0.035          | 0.009           | 0.044           | -0.081          | -0.008          | 0.073           | -0.101          | -0.050          | 0.051           | -0.137          | -0.042          | 0.095           | -0.167          | -0.058          | 0.109           | 0.1500 |
| 0.2000                    | -0.048          | 0.003           | 0.051           | -0.081          | -0.020          | 0.061           | -0.106          | -0.055          | 0.052           | -0.135          | -0.052          | 0.083           | -0.154          | -0.075          | 0.079           | 0.2000 |
| 0.3000                    | -0.059          | -0.014          | 0.045           | -0.079          | -0.045          | 0.034           | -0.109          | -0.066          | 0.042           | -0.121          | -0.080          | 0.041           | -0.137          | -0.106          | 0.031           | 0.3000 |
| 0.4000                    | -0.059          | -0.039          | 0.021           | -0.089          | -0.073          | 0.016           | -0.109          | -0.067          | 0.041           | -0.117          | -0.104          | 0.013           | -0.137          | -0.134          | 0.002           | 0.4000 |
| 0.5000                    | -0.103          | -0.099          | 0.004           | -0.111          | -0.086          | 0.025           | -0.127          | -0.094          | 0.035           | -0.133          | -0.119          | 0.014           | -0.152          | -0.142          | 0.010           | 0.5000 |
| 0.6000                    | -0.075          | -0.070          | 0.005           | -0.092          | -0.093          | -0.001          | -0.119          | -0.099          | 0.019           | -0.125          | -0.121          | 0.004           | -0.140          | -0.139          | 0.002           | 0.6000 |
| 0.7000                    | -0.087          | -0.088          | -0.001          | -0.099          | -0.100          | -0.001          |                 | -0.113          |                 | -0.113          | -0.126          | -0.013          | -0.133          | -0.141          | -0.007          | 0.7000 |
| 0.8000                    | -0.074          | -0.097          | -0.023          | -0.074          | -0.096          | -0.022          | -0.083          | -0.121          | -0.038          | -0.097          | -0.143          | -0.045          |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.033           | -0.086          | -0.119          | 0.074           | -0.054          | -0.128          | -0.022          | -0.120          | -0.098          | -0.057          | -0.214          | -0.157          | -0.140          | -0.184          | -0.044          | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

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| x/c                       | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 1.302      α = -00.15 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.031           | -0.083          | -0.114          | 0.054           | -0.152          | -0.206          | 0.105           | -0.137          | -0.243          | 0.063           | -0.217          | -0.280          | -0.004          | -0.330          | -0.326          | 0.0000 |
| 0.0250                    | 0.024           | -0.096          | -0.120          | -0.006          | -0.170          | -0.163          | 0.005           | -0.176          | -0.182          | -0.021          | -0.211          | -0.190          |                 |                 |                 | 0.0250 |
| 0.0500                    | 0.007           | -0.104          | -0.112          | -0.044          | -0.175          | -0.131          | -0.057          | -0.193          | -0.136          | -0.076          | -0.203          | -0.127          | -0.098          | -0.249          | -0.151          | 0.0500 |
| 0.1000                    | -0.052          | -0.105          | -0.054          | -0.056          | -0.150          | -0.094          | -0.068          | -0.158          | -0.090          | -0.101          | -0.188          | -0.087          | -0.141          | -0.200          | -0.059          | 0.1000 |
| 0.1500                    | -0.093          | -0.121          | -0.067          | -0.073          | -0.129          | -0.056          | -0.077          | -0.145          | -0.068          | -0.115          | -0.180          | -0.065          | -0.135          | -0.184          | -0.049          | 0.1500 |
| 0.2000                    | -0.064          | -0.103          | -0.039          | -0.080          | -0.145          | -0.065          | -0.095          | -0.137          | -0.042          | -0.124          | -0.172          | -0.048          | -0.132          | -0.168          | -0.036          | 0.2000 |
| 0.3000                    | -0.074          | -0.111          | -0.037          | -0.102          | -0.140          | -0.038          | -0.108          | -0.177          | -0.070          | -0.125          | -0.178          | -0.053          | -0.128          | -0.188          | -0.060          | 0.3000 |
| 0.4000                    | -0.088          | -0.119          | -0.031          | -0.110          | -0.147          | -0.037          | -0.121          | -0.179          | -0.058          | -0.134          | -0.173          | -0.039          | -0.146          | -0.207          | -0.061          | 0.4000 |
| 0.5000                    | -0.127          | -0.142          | -0.015          | -0.125          | -0.154          | -0.029          | -0.137          | -0.154          | -0.017          | -0.149          | -0.193          | -0.044          | -0.157          | -0.191          | -0.034          | 0.5000 |
| 0.6000                    | -0.119          | -0.170          | -0.051          | -0.118          | -0.169          | -0.050          | -0.140          | -0.191          | -0.051          | -0.146          | -0.193          | -0.047          | -0.156          | -0.201          | -0.045          | 0.6000 |
| 0.7000                    | -0.120          | -0.155          | -0.035          | -0.124          | -0.170          | -0.046          |                 | -0.171          |                 | -0.133          | -0.188          | -0.055          | -0.155          | -0.203          | -0.048          | 0.7000 |
| 0.8000                    | -0.099          | -0.168          | -0.069          | -0.093          | -0.154          | -0.061          | -0.100          | -0.155          | -0.054          | -0.114          | -0.167          | -0.053          |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.013           | -0.275          | -0.288          | 0.077           | -0.071          | -0.148          | 0.001           | -0.132          | -0.133          | -0.053          | -0.076          | -0.023          | -0.147          | -0.159          | -0.012          | 1.0000 |
| M = 1.303      α = 03.88  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.046           | -0.287          | -0.333          | 0.030           | -0.393          | -0.422          | 0.140           | -0.314          | -0.454          | 0.101           | -0.457          | -0.557          | 0.015           | -0.520          | -0.535          | 0.0000 |
| 0.0250                    | 0.022           | -0.270          | -0.291          | 0.001           | -0.366          | -0.367          | 0.025           | -0.358          | -0.383          | 0.004           | -0.413          | -0.417          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.007          | -0.255          | -0.248          | -0.025          | -0.341          | -0.316          | -0.049          | -0.374          | -0.324          | -0.062          | -0.378          | -0.316          | -0.081          | -0.426          | -0.345          | 0.0500 |
| 0.1000                    | -0.080          | -0.233          | -0.153          | -0.069          | -0.294          | -0.225          | -0.075          | -0.318          | -0.243          | -0.099          | -0.333          | -0.234          | -0.132          | -0.365          | -0.233          | 0.1000 |
| 0.1500                    | -0.084          | -0.221          | -0.137          | -0.096          | -0.259          | -0.163          | -0.093          | -0.293          | -0.200          | -0.121          | -0.315          | -0.194          | -0.137          | -0.337          | -0.200          | 0.1500 |
| 0.2000                    | -0.100          | -0.209          | -0.109          | -0.112          | -0.255          | -0.143          | -0.117          | -0.271          | -0.154          | -0.133          | -0.299          | -0.166          | -0.144          | -0.311          | -0.167          | 0.2000 |
| 0.3000                    | -0.121          | -0.206          | -0.085          | -0.136          | -0.252          | -0.116          | -0.135          | -0.240          | -0.104          | -0.140          | -0.287          | -0.148          | -0.150          | -0.294          | -0.143          | 0.3000 |
| 0.4000                    | -0.134          | -0.211          | -0.077          | -0.154          | -0.244          | -0.090          | -0.159          | -0.260          | -0.101          | -0.154          | -0.264          | -0.110          | -0.170          | -0.262          | -0.092          | 0.4000 |
| 0.5000                    | -0.169          | -0.234          | -0.065          | -0.166          | -0.247          | -0.082          | -0.182          | -0.250          | -0.067          | -0.179          | -0.238          | -0.059          | -0.186          | -0.251          | -0.065          | 0.5000 |
| 0.6000                    | -0.166          | -0.227          | -0.061          | -0.161          | -0.257          | -0.097          | -0.178          | -0.225          | -0.047          | -0.179          | -0.244          | -0.066          | -0.181          | -0.263          | -0.081          | 0.6000 |
| 0.7000                    | -0.174          | -0.241          | -0.066          | -0.162          | -0.210          | -0.048          |                 | -0.261          |                 | -0.161          | -0.288          | -0.127          | -0.166          | -0.252          | -0.085          | 0.7000 |
| 0.8000                    | -0.096          | -0.113          | -0.017          | -0.139          | -0.219          | -0.080          | -0.136          | -0.234          | -0.097          | -0.134          | -0.281          | -0.147          |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.316           | 0.563           | 0.247           | -0.020          | -0.409          | -0.388          | -0.050          | 0.012           | 0.062           | -0.050          | -0.113          | -0.063          | -0.058          | -0.082          | -0.025          | 1.0000 |
| M = 1.302      α = 07.91  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.075          | -0.090          | -0.014          | -0.076          | -0.392          | -0.316          | 0.099           | -0.347          | -0.446          | 0.058           | -0.513          | -0.572          | 0.024           | -0.527          | -0.551          | 0.0000 |
| 0.0250                    | -0.128          | -0.141          | -0.014          | -0.087          | -0.376          | -0.289          | -0.015          | -0.414          | -0.399          | -0.027          | -0.487          | -0.460          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.184          | -0.178          | 0.007           | -0.109          | -0.361          | -0.252          | -0.092          | -0.443          | -0.351          | -0.082          | -0.464          | -0.382          | -0.091          | -0.506          | -0.415          | 0.0500 |
| 0.1000                    | -0.311          | -0.205          | 0.106           | -0.188          | -0.329          | -0.142          | -0.130          | -0.385          | -0.255          | -0.101          | -0.429          | -0.328          | -0.153          | -0.477          | -0.324          | 0.1000 |
| 0.1500                    | -0.275          | -0.228          | 0.047           | -0.205          | -0.303          | -0.098          | -0.164          | -0.371          | -0.207          | -0.154          | -0.413          | -0.258          | -0.162          | -0.439          | -0.277          | 0.1500 |
| 0.2000                    | -0.250          | -0.229          | 0.021           | -0.215          | -0.298          | -0.083          | -0.182          | -0.363          | -0.181          | -0.160          | -0.405          | -0.245          | -0.168          | -0.420          | -0.252          | 0.2000 |
| 0.3000                    | -0.225          | -0.259          | 0.033           | -0.222          | -0.299          | -0.077          | -0.203          | -0.318          | -0.115          | -0.187          | -0.372          | -0.186          | -0.185          | -0.406          | -0.221          | 0.3000 |
| 0.4000                    | -0.209          | -0.274          | -0.065          | -0.228          | -0.301          | -0.073          | -0.219          | -0.319          | -0.101          | -0.207          | -0.343          | -0.136          | -0.208          | -0.384          | -0.176          | 0.4000 |
| 0.5000                    | -0.207          | -0.302          | -0.095          | -0.229          | -0.304          | -0.075          | -0.226          | -0.330          | -0.104          | -0.230          | -0.327          | -0.098          | -0.222          | -0.339          | -0.118          | 0.5000 |
| 0.6000                    | -0.195          | -0.300          | -0.105          | -0.222          | -0.332          | -0.110          | -0.228          | -0.320          | -0.091          | -0.233          | -0.314          | -0.081          | -0.224          | -0.315          | -0.092          | 0.6000 |
| 0.7000                    | -0.202          | -0.304          | -0.102          | -0.223          | -0.305          | -0.082          |                 | -0.312          |                 | -0.211          | -0.310          | -0.098          | -0.207          | -0.327          | -0.120          | 0.7000 |
| 0.8000                    | -0.101          | -0.157          | -0.056          | -0.194          | -0.259          | -0.065          | -0.213          | -0.297          | -0.085          | -0.186          | -0.330          | -0.145          |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.422           | 0.589           | 0.167           | -0.049          | -0.111          | -0.062          | -0.170          | -0.245          | -0.075          | -0.125          | -0.447          | -0.322          | -0.040          | -0.571          | -0.531          | 1.0000 |
| M = 1.302      α = 11.89  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.744          | -0.471          | 0.273           | -0.029          | -0.291          | -0.262          | 0.074           | -0.547          | -0.622          | 0.041           | -0.587          | -0.628          | -0.008          | -0.536          | -0.528          | 0.0000 |
| 0.0250                    | -0.741          | -0.458          | 0.283           | -0.103          | -0.298          | -0.195          | -0.017          | -0.490          | -0.473          | -0.028          | -0.555          | -0.526          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.737          | -0.444          | 0.293           | -0.157          | -0.293          | -0.136          | -0.084          | -0.455          | -0.372          | -0.084          | -0.531          | -0.447          | -0.114          | -0.523          | -0.40           | 0.0500 |
| 0.1000                    | -0.725          | -0.413          | 0.312           | -0.207          | -0.253          | -0.046          | -0.144          | -0.453          | -0.309          | -0.155          | -0.509          | -0.354          | -0.177          | -0.510          | -0.332          | 0.1000 |
| 0.1500                    | -0.694          | -0.399          | 0.295           | -0.269          | -0.258          | 0.011           | -0.185          | -0.436          | -0.251          | -0.192          | -0.506          | -0.315          | -0.198          | -0.496          | -0.298          | 0.1500 |
| 0.2000                    | -0.670          | -0.397          | 0.273           | -0.314          | -0.283          | 0.031           | -0.238          | -0.361          | -0.123          | -0.222          | -0.499          | -0.277          | -0.221          | -0.492          | -0.272          | 0.2000 |
| 0.3000                    | -0.626          | -0.414          | 0.212           | -0.364          | -0.324          | 0.040           | -0.281          | -0.345          | -0.064          | -0.251          | -0.400          | -0.149          | -0.242          | -0.486          | -0.244          | 0.3000 |
| 0.4000                    | -0.587          | -0.384          | 0.203           | -0.403          | -0.349          | 0.054           | -0.322          | -0.342          | -0.020          | -0.285          | -0.367          | -0.082          | -0.236          | -0.465          | -0.229          | 0.4000 |
| 0.5000                    | -0.513          | -0.313          | 0.200           | -0.417          | -0.350          | 0.066           | -0.361          | -0.340          | 0.021           | -0.287          | -0.374          | -0.087          | -0.191          | -0.375          | -0.184          | 0.5000 |
| 0.6000                    | -0.347          | -0.288          | 0.059           | -0.378          | -0.336          | 0.042           | -0.361          | -0.351          | 0.010           | -0.252          | -0.349          | -0.097          | -0.173          | -0.344          | -0.171          | 0.6000 |
| 0.7000                    | -0.297          | -0.270          | 0.028           | -0.335          | -0.273          | 0.062           |                 | -0.208          |                 | -0.086          | -0.269          | -0.183          | -0.115          | -0.310          | -0.199          | 0.7000 |
| 0.8000                    | -0.071          | -0.137          | 0.067           | 0.067           | -0.168          | -0.234          | 0.042           | -0.151          | -0.193          | -0.024          | -0.183          | -0.159          |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.915           | 0.470           | -0.445          | 1.942           | 0.167           | -1.775          | 0.984           | -0.301          | -1.285          | -0.211          | 0.012           | 0.223           | 0.304           | -0.182          | -0.486          | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                      | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> |        |
| M = 1.302      α = 15.87 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.584          | -0.387          | 0.197           | -0.529          | -0.621          | -0.092          | 0.001           | -0.530          | -0.530          | -0.130          | -0.629          | -0.499          | 0.031           | -0.612          | -0.644          | 0.0000 |
| 0.0250                   | -0.589          | -0.362          | 0.227           | -0.557          | -0.609          | -0.052          | -0.109          | -0.513          | -0.405          | -0.080          | -0.624          | -0.544          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.590          | -0.395          | 0.254           | -0.574          | -0.598          | -0.024          | -0.180          | -0.499          | -0.319          | -0.063          | -0.621          | -0.558          | -0.086          | -0.604          | -0.518          | 0.0500 |
| 0.1000                   | -0.589          | -0.278          | 0.305           | -0.575          | -0.579          | -0.004          | -0.212          | -0.478          | -0.266          | -0.128          | -0.618          | -0.490          | -0.153          | -0.595          | -0.443          | 0.1000 |
| 0.1500                   | -0.591          | -0.258          | 0.334           | -0.578          | -0.547          | 0.030           | -0.254          | -0.461          | -0.207          | -0.178          | -0.621          | -0.443          | -0.169          | -0.588          | -0.419          | 0.1500 |
| 0.2000                   | -0.593          | -0.250          | 0.343           | -0.579          | -0.523          | 0.056           | -0.287          | -0.474          | -0.187          | -0.203          | -0.610          | -0.407          | -0.185          | -0.581          | -0.396          | 0.2000 |
| 0.3000                   | -0.596          | -0.244          | 0.352           | -0.583          | -0.486          | 0.097           | -0.337          | -0.489          | -0.151          | -0.238          | -0.519          | -0.281          | -0.218          | -0.567          | -0.349          | 0.3000 |
| 0.4000                   | -0.595          | -0.246          | 0.349           | -0.585          | -0.459          | 0.126           | -0.386          | -0.476          | -0.090          | -0.274          | -0.419          | -0.146          | -0.216          | -0.545          | -0.329          | 0.4000 |
| 0.5000                   | -0.594          | -0.266          | 0.328           | -0.589          | -0.456          | 0.133           | -0.412          | -0.369          | 0.043           | -0.290          | -0.280          | 0.010           | -0.168          | -0.492          | -0.324          | 0.5000 |
| 0.6000                   | -0.592          | -0.245          | 0.347           | -0.564          | -0.455          | 0.109           | -0.412          | -0.266          | 0.145           | -0.282          | -0.198          | 0.084           | -0.112          | -0.409          | -0.297          | 0.6000 |
| 0.7000                   | -0.584          | -0.190          | 0.394           | -0.544          | -0.482          | 0.063           | -0.206          | -0.206          |                 | -0.139          | -0.153          | -0.014          | 0.132           | -0.227          | -0.360          | 0.7000 |
| 0.8000                   | -0.500          | 0.062           | 0.438           | -0.356          | -0.420          | -0.064          | -0.065          | -0.203          | -0.138          | 0.061           | -0.134          | -0.195          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.109          | 0.409           | 0.517           | 0.530           | -0.029          | -0.559          | 0.743           | -0.372          | -1.115          | 0.631           | -0.174          | -0.805          | 1.989           | 0.905           | -1.084          | 1.0000 |
| M = 1.499      α = 03.83 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.044           | -0.203          | -0.247          | 0.122           | -0.253          | -0.374          | 0.121           | -0.128          | -0.249          | 0.104           | -0.229          | -0.332          | 0.066           | -0.319          | -0.386          | 0.0000 |
| 0.0250                   | 0.026           | -0.211          | -0.237          | 0.035           | -0.265          | -0.299          | 0.053           | -0.128          | -0.273          | 0.021           | -0.262          | -0.283          |                 |                 |                 | 0.0250 |
| 0.0500                   | 0.002           | -0.212          | -0.214          | -0.022          | -0.267          | -0.245          | 0.007           | -0.273          | -0.280          | -0.036          | -0.280          | -0.245          | -0.040          | -0.300          | -0.261          | 0.0500 |
| 0.1000                   | -0.060          | -0.193          | -0.133          | -0.046          | -0.245          | -0.199          | -0.033          | -0.274          | -0.241          | -0.071          | -0.270          | -0.199          | -0.095          | -0.285          | -0.189          | 0.1000 |
| 0.1500                   | -0.079          | -0.182          | -0.103          | -0.068          | -0.217          | -0.149          | -0.061          | -0.245          | -0.184          | -0.093          | -0.259          | -0.167          | -0.100          | -0.272          | -0.172          | 0.1500 |
| 0.2000                   | -0.082          | -0.188          | -0.107          | -0.079          | -0.206          | -0.127          | -0.084          | -0.231          | -0.147          | -0.106          | -0.256          | -0.151          | -0.106          | -0.257          | -0.151          | 0.2000 |
| 0.3000                   | -0.093          | -0.187          | -0.095          | -0.097          | -0.199          | -0.102          | -0.109          | -0.211          | -0.102          | -0.110          | -0.248          | -0.137          | -0.114          | -0.247          | -0.133          | 0.3000 |
| 0.4000                   | -0.108          | -0.182          | -0.074          | -0.111          | -0.183          | -0.072          | -0.122          | -0.005          | 0.127           | -0.125          | -0.227          | -0.102          | -0.128          | -0.230          | -0.101          | 0.4000 |
| 0.5000                   | -0.113          | -0.192          | -0.079          | -0.123          | -0.203          | -0.080          | -0.136          | -0.211          | -0.075          | -0.139          | -0.214          | -0.075          | -0.143          | -0.231          | -0.088          | 0.5000 |
| 0.6000                   | -0.132          | -0.193          | -0.061          | -0.132          | -0.206          | -0.074          | -0.143          | -0.202          | -0.058          | -0.147          | -0.214          | -0.067          | -0.150          | -0.226          | -0.076          | 0.6000 |
| 0.7000                   | -0.134          | -0.182          | -0.048          | -0.151          | -0.202          | -0.051          |                 | -0.219          |                 | -0.149          | -0.216          | -0.068          | -0.154          | -0.231          | -0.077          | 0.7000 |
| 0.8000                   | -0.130          | -0.148          | -0.018          | -0.140          | -0.207          | -0.067          | -0.127          | -0.237          | -0.110          | -0.146          | -0.229          | -0.083          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.103          | -0.006          | 0.097           | -0.029          | -0.248          | -0.219          | -0.071          | -0.274          | -0.203          | -0.130          | -0.287          | -0.157          | -0.145          | -0.299          | -0.153          | 1.0000 |
| M = 1.703      α = 03.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.062           | -0.139          | -0.201          | 0.140           | -0.127          | -0.266          | 0.122           | -0.051          | -0.173          | 0.110           | -0.110          | -0.220          | 0.081           | -0.208          | -0.289          | 0.0000 |
| 0.0250                   | 0.026           | -0.157          | -0.183          | 0.039           | -0.161          | -0.200          | 0.050           | -0.128          | -0.178          | 0.033           | -0.150          | -0.184          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.004          | -0.167          | -0.163          | -0.024          | -0.182          | -0.158          |                 | -0.177          | -0.177          | -0.019          | -0.176          | -0.157          | -0.019          | -0.192          | -0.173          | 0.0500 |
| 0.1000                   | -0.046          | -0.161          | -0.115          | -0.038          | -0.187          | -0.148          | -0.037          | -0.194          | -0.156          | -0.050          | -0.183          | -0.134          | -0.072          | -0.183          | -0.111          | 0.1000 |
| 0.1500                   | -0.065          | -0.157          | -0.092          | -0.061          | -0.185          | -0.124          | -0.062          | -0.193          | -0.132          | -0.068          | -0.186          | -0.118          | -0.078          | -0.181          | -0.102          | 0.1500 |
| 0.2000                   | -0.076          | -0.153          | -0.078          | -0.078          | -0.178          | -0.100          | -0.076          | -0.192          | -0.116          | -0.083          | -0.193          | -0.110          | -0.087          | -0.180          | -0.094          | 0.2000 |
| 0.3000                   | -0.084          | -0.150          | -0.066          | -0.090          | -0.170          | -0.079          | -0.092          | -0.190          | -0.098          | -0.091          | -0.197          | -0.106          | -0.095          | -0.185          | -0.090          | 0.3000 |
| 0.4000                   | -0.100          | -0.157          | -0.056          | -0.098          | -0.169          | -0.071          | -0.104          | -0.186          | -0.082          | -0.103          | -0.192          | -0.090          | -0.103          | -0.189          | -0.086          | 0.4000 |
| 0.5000                   | -0.107          | -0.163          | -0.056          | -0.108          | -0.174          | -0.067          | -0.114          | -0.175          | -0.061          | -0.115          | -0.187          | -0.072          | -0.111          | -0.191          | -0.080          | 0.5000 |
| 0.6000                   | -0.121          | -0.165          | -0.044          | -0.105          | -0.169          | -0.064          | -0.121          | -0.177          | -0.056          | -0.122          | -0.192          | -0.070          | -0.119          | -0.195          | -0.076          | 0.6000 |
| 0.7000                   | -0.124          | -0.165          | -0.041          | -0.117          | -0.178          | -0.062          |                 | -0.184          |                 | -0.124          | -0.190          | -0.066          | -0.120          | -0.193          | -0.073          | 0.7000 |
| 0.8000                   | -0.120          | -0.158          | -0.037          | -0.128          | -0.172          | -0.044          | -0.107          | -0.175          | -0.068          | -0.121          | -0.184          | -0.062          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.095          | -0.124          | -0.029          | -0.148          | -0.110          | 0.038           | -0.056          | -0.111          | -0.055          | -0.101          | -0.161          | -0.060          | -0.088          | -0.151          | -0.063          | 1.0000 |
| M = 1.908      α = 03.93 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.081           | -0.054          | -0.134          | 0.144           | -0.076          | -0.220          | 0.161           | -0.001          | -0.162          | 0.134           | -0.033          | -0.166          | 0.117           | -0.121          | -0.238          | 0.0000 |
| 0.0250                   | 0.041           | -0.080          | -0.121          | 0.052           | -0.108          | -0.159          | 0.073           | -0.064          | -0.136          | 0.060           | -0.076          | -0.136          |                 |                 |                 | 0.0250 |
| 0.0500                   | 0.008           | -0.100          | -0.107          | -0.008          | -0.129          | -0.121          | 0.012           | -0.106          | -0.118          | 0.010           | -0.105          | -0.115          | 0.020           | -0.116          | -0.136          | 0.0500 |
| 0.1000                   | -0.042          | -0.123          | -0.081          | -0.032          | -0.140          | -0.108          | -0.022          | -0.129          | -0.107          | -0.020          | -0.120          | -0.100          | -0.032          | -0.113          | -0.081          | 0.1000 |
| 0.1500                   | -0.055          | -0.140          | -0.085          | -0.045          | -0.143          | -0.098          | -0.040          | -0.135          | -0.095          | -0.038          | -0.125          | -0.088          | -0.039          | -0.113          | -0.073          | 0.1500 |
| 0.2000                   | -0.067          | -0.141          | -0.074          | -0.060          | -0.146          | -0.086          | -0.058          | -0.140          | -0.082          | -0.052          | -0.132          | -0.080          | -0.049          | -0.116          | -0.067          | 0.2000 |
| 0.3000                   | -0.073          | -0.129          | -0.056          | -0.080          | -0.148          | -0.068          | -0.075          | -0.150          | -0.076          | -0.062          | -0.142          | -0.080          | -0.060          | -0.127          | -0.067          | 0.3000 |
| 0.4000                   | -0.088          | -0.128          | -0.040          | -0.084          | -0.148          | -0.064          | -0.082          | -0.151          | -0.069          | -0.075          | -0.149          | -0.074          | -0.069          | -0.136          | -0.066          | 0.4000 |
| 0.5000                   | -0.090          | -0.134          | -0.045          | -0.095          | -0.148          | -0.053          | -0.093          | -0.146          | -0.053          | -0.087          | -0.154          | -0.067          | -0.080          | -0.087          | -0.007          | 0.5000 |
| 0.6000                   | -0.100          | -0.137          | -0.037          | -0.075          | -0.146          | -0.072          | -0.101          | -0.145          | -0.044          | -0.096          | -0.148          | -0.052          | -0.088          | -0.089          | -0.001          | 0.6000 |
| 0.7000                   | -0.105          | -0.139          | -0.034          | -0.107          | -0.145          | -0.039          |                 | -0.145          |                 | -0.098          | -0.153          | -0.055          | -0.094          | -0.084          | 0.010           | 0.7000 |
| 0.8000                   | -0.107          | -0.133          | -0.026          | -0.109          | -0.144          | -0.035          | -0.100          | -0.148          | -0.048          | -0.096          | -0.153          | -0.057          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.105          | -0.103          | 0.002           | -0.025          | -0.140          | -0.115          | -0.073          | -0.164          | -0.091          | -0.077          | -0.138          | -0.061          | -0.093          | -0.029          | 0.064           | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

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| x/c                      | y/b=0.150                 |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pL</sub>           | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> |        |
|                          | M = 2.230      α = -03.73 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.136                     | 0.125           | -0.011          | 0.193           | 0.154           | -0.039          | 0.245           | 0.221           | -0.024          | 0.203           | 0.189           | -0.014          | 0.211           | 0.075           | -0.136          | 0.0000 |
| 0.0250                   | 0.085                     | 0.092           | 0.007           | 0.110           | 0.089           | -0.021          | 0.135           | 0.134           | -0.001          | 0.122           | 0.122           | -0.001          |                 |                 |                 | 0.0250 |
| 0.0500                   | 0.047                     | 0.063           | 0.017           | 0.054           | 0.046           | -0.009          | 0.063           | 0.074           | 0.012           | 0.067           | 0.076           | 0.010           | 0.090           | 0.067           | -0.023          | 0.0500 |
| 0.1000                   | 0.010                     | 0.021           | 0.010           | 0.023           | 0.023           | 0.000           | 0.033           | 0.038           | 0.005           | 0.032           | 0.052           | 0.020           | 0.026           | 0.058           | 0.032           | 0.1000 |
| 0.1500                   | -0.003                    | -0.005          | -0.001          | 0.002           | 0.007           | 0.006           | 0.016           | 0.024           | 0.008           | 0.016           | 0.041           | 0.025           | 0.018           | 0.049           | 0.031           | 0.1500 |
| 0.2000                   | -0.006                    | -0.010          | -0.004          | -0.012          | -0.006          | 0.006           | 0.004           | 0.018           | 0.018           | 0.016           | 0.041           | 0.025           | 0.018           | 0.049           | 0.031           | 0.2000 |
| 0.3000                   | -0.014                    | -0.011          | 0.003           | -0.021          | -0.014          | 0.007           | -0.020          | -0.009          | 0.012           | 0.001           | 0.025           | 0.025           | 0.009           | 0.033           | 0.024           | 0.3000 |
| 0.4000                   | -0.021                    | -0.013          | 0.009           | -0.026          | -0.021          | 0.005           | -0.028          | -0.026          | 0.003           | -0.021          | -0.014          | 0.006           | -0.001          | 0.013           | 0.015           | 0.4000 |
| 0.5000                   | -0.027                    | -0.015          | 0.012           | -0.033          | -0.026          | 0.007           | -0.039          | -0.024          | 0.015           | -0.032          | -0.021          | 0.011           | -0.010          | 0.001           | 0.011           | 0.5000 |
| 0.6000                   | -0.031                    | -0.027          | 0.004           | -0.002          | -0.027          | -0.026          | -0.040          | -0.025          | 0.015           | -0.040          | -0.026          | 0.014           | -0.028          | -0.023          | 0.005           | 0.6000 |
| 0.7000                   | -0.036                    | -0.030          | 0.007           | -0.036          | -0.030          | 0.006           | -0.035          |                 |                 | -0.041          | -0.039          | 0.002           | -0.034          | -0.032          | 0.002           | 0.7000 |
| 0.8000                   | -0.038                    | -0.032          | 0.006           | -0.038          | -0.032          | 0.001           | -0.036          | -0.044          | -0.008          | -0.041          | -0.049          | -0.008          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.030                    | -0.033          | -0.003          | 0.056           | -0.066          | -0.123          | -0.026          | -0.057          | -0.031          | -0.039          | -0.065          | -0.026          | -0.029          | -0.058          | -0.029          | 1.0000 |
| M = 2.237      α = 00.20 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.089                     | 0.032           | -0.057          | 0.164           | 0.039           | -0.125          | 0.205           | 0.075           | -0.130          | 0.174           | 0.102           | -0.073          | 0.169           | 0.002           | -0.167          | 0.0000 |
| 0.0250                   | 0.069                     | 0.014           | -0.055          | 0.095           | 0.003           | -0.092          | 0.112           | 0.031           | -0.081          | 0.101           | 0.043           | -0.058          |                 |                 |                 | 0.0250 |
| 0.0500                   | 0.046                     | -0.007          | -0.054          | 0.048           | -0.023          | -0.070          | 0.051           | -0.001          | -0.052          | 0.050           | 0.004           | -0.047          | 0.064           | -0.004          | -0.067          | 0.0500 |
| 0.1000                   | -0.003                    | -0.055          | -0.052          | -0.015          | -0.044          | -0.058          | 0.024           | -0.030          | -0.055          | 0.017           | -0.017          | -0.034          | 0.007           | -0.010          | -0.016          | 0.1000 |
| 0.1500                   | -0.020                    | -0.075          | -0.054          | -0.008          | -0.060          | -0.052          | 0.003           | -0.042          | -0.055          | 0.017           | -0.017          | -0.034          | 0.007           | -0.010          | -0.016          | 0.1500 |
| 0.2000                   | -0.027                    | -0.070          | -0.043          | -0.027          | -0.075          | -0.049          | -0.017          | -0.054          | -0.046          |                 | -0.026          | -0.026          | -0.002          | -0.016          | -0.014          | 0.2000 |
| 0.3000                   | -0.036                    | -0.069          | -0.033          | -0.038          | -0.076          | -0.038          | -0.036          | 0.067           | -0.038          | -0.015          | -0.037          | -0.022          | -0.010          | 0.024           | -0.014          | 0.3000 |
| 0.4000                   | -0.047                    | -0.069          | -0.022          | -0.046          | -0.080          | -0.033          | -0.045          | -0.076          | -0.031          | -0.038          | -0.053          | -0.027          | -0.020          | -0.037          | -0.017          | 0.4000 |
| 0.5000                   | -0.051                    | -0.067          | -0.016          | -0.055          | -0.078          | -0.022          | -0.054          | -0.081          | -0.026          | -0.049          | -0.077          | -0.028          | -0.040          | -0.052          | -0.022          | 0.5000 |
| 0.6000                   | -0.056                    | -0.070          | -0.013          | -0.015          | -0.079          | -0.059          | -0.061          | -0.084          | -0.023          | -0.056          | -0.078          | -0.022          | -0.048          | -0.073          | -0.025          | 0.6000 |
| 0.7000                   | -0.063                    | -0.076          | -0.013          | -0.061          | -0.079          | -0.019          | -0.084          |                 | -0.061          | -0.061          | -0.084          | -0.023          | -0.054          | -0.075          | -0.021          | 0.7000 |
| 0.8000                   | -0.063                    | -0.076          | -0.013          | -0.061          | -0.079          | -0.019          | -0.084          |                 | -0.061          | -0.061          | -0.084          | -0.023          | -0.054          | -0.075          | -0.021          | 0.8000 |
| 1.0000                   | -0.035                    | -0.055          | -0.020          | 0.050           | -0.086          | -0.137          | -0.042          | -0.118          | -0.077          | -0.060          | -0.094          | -0.034          | -0.080          |                 |                 | 1.0000 |
| M = 2.235      α = 04.18 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.085                     | -0.065          | -0.149          | 0.161           | -0.032          | -0.193          | -0.024          | 0.033           | 0.057           | 0.149           | 0.009           | -0.140          | 0.142           | -0.063          | -0.205          | 0.0000 |
| 0.0250                   | 0.053                     | -0.064          | -0.117          | 0.081           | -0.063          | -0.145          | 0.027           | -0.024          | -0.051          | 0.081           | -0.036          | -0.117          |                 |                 |                 | 0.0250 |
| 0.0500                   | 0.024                     | -0.071          | -0.095          | 0.027           | -0.085          | -0.112          | 0.049           | -0.064          | -0.113          | 0.034           | -0.066          | -0.100          | 0.046           | -0.068          | -0.113          | 0.0500 |
| 0.1000                   | -0.022                    | -0.105          | -0.082          | -0.006          | -0.101          | -0.096          | 0.008           | -0.089          | -0.097          | 0.003           | -0.078          | -0.081          | -0.007          | -0.072          | -0.065          | 0.1000 |
| 0.1500                   | -0.049                    | -0.111          | -0.062          | -0.020          | -0.105          | -0.085          | -0.011          | -0.100          | -0.089          | -0.014          | -0.084          | -0.070          | -0.015          | -0.076          | -0.060          | 0.1500 |
| 0.2000                   | -0.055                    | -0.108          | -0.053          | -0.040          | -0.114          | -0.074          | -0.028          | -0.106          | -0.078          | -0.014          | -0.084          | -0.070          | -0.015          | -0.076          | -0.060          | 0.2000 |
| 0.3000                   | -0.067                    | -0.112          | -0.045          | -0.058          | -0.120          | -0.062          | -0.049          | -0.114          | -0.065          | -0.029          | -0.090          | -0.061          | -0.025          | -0.081          | -0.056          | 0.3000 |
| 0.4000                   | -0.073                    | -0.109          | -0.036          | -0.066          | -0.122          | -0.057          | -0.061          | -0.123          | -0.061          | -0.053          | -0.102          | -0.062          | -0.036          | -0.091          | -0.056          | 0.4000 |
| 0.5000                   | -0.079                    | -0.107          | -0.028          | -0.076          | -0.119          | -0.044          | -0.069          | -0.124          | -0.055          | -0.053          | -0.102          | -0.062          | -0.036          | -0.099          | -0.054          | 0.5000 |
| 0.6000                   | -0.082                    | -0.109          | -0.027          | -0.076          | -0.119          | -0.044          | -0.069          | -0.124          | -0.055          | -0.053          | -0.102          | -0.062          | -0.036          | -0.099          | -0.054          | 0.6000 |
| 0.7000                   | -0.088                    | -0.111          | -0.023          | -0.083          | -0.115          | -0.033          | -0.078          | -0.124          | -0.046          | -0.074          | -0.116          | -0.042          | -0.064          | -0.114          | -0.050          | 0.7000 |
| 0.8000                   | -0.089                    | -0.105          | -0.016          | -0.085          | -0.117          | -0.032          | -0.077          | -0.128          | -0.078          | -0.126          | -0.049          | -0.070          | -0.118          | -0.047          | 0.7000          | 0.8000 |
| 1.0000                   | -0.070                    | -0.066          | 0.004           | 0.031           | -0.133          | -0.164          | -0.053          | -0.134          | -0.081          | -0.070          | -0.139          | -0.069          | -0.084          | -0.133          | -0.050          | 1.0000 |
| M = 2.234      α = 08.21 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.050                     | -0.138          | -0.188          | 0.134           | -0.133          | -0.267          | 0.160           | -0.061          | -0.221          | 0.140           | -0.083          | -0.223          | 0.121           | -0.123          | -0.244          | 0.0000 |
| 0.0250                   | 0.005                     | -0.155          | -0.160          | 0.046           | -0.153          | -0.199          | 0.075           | -0.106          | -0.180          | 0.073           | -0.112          | -0.185          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.030                    | -0.166          | -0.136          | -0.013          | -0.164          | -0.151          | 0.018           | -0.135          | -0.154          | 0.027           | -0.130          | -0.157          | 0.036           | -0.126          | -0.163          | 0.0500 |
| 0.1000                   | -0.067                    | -0.170          | -0.102          | -0.042          | -0.155          | -0.098          | -0.031          | -0.148          | -0.140          | 0.005           | -0.137          | -0.132          | -0.012          | -0.130          | -0.118          | 0.1000 |
| 0.1500                   | -0.089                    | -0.173          | -0.083          | -0.055          | -0.153          | -0.098          | -0.031          | -0.153          | -0.122          | -0.023          | -0.138          | -0.115          | -0.023          | -0.133          | -0.111          | 0.1500 |
| 0.2000                   | -0.095                    | -0.167          | -0.072          | -0.076          | -0.152          | -0.076          | -0.048          | -0.158          | -0.109          | -0.039          | -0.142          | -0.103          | -0.034          | -0.137          | -0.103          | 0.2000 |
| 0.3000                   | -0.113                    | -0.150          | -0.038          | -0.088          | -0.154          | -0.066          | -0.064          | -0.160          | -0.096          | -0.039          | -0.142          | -0.103          | -0.034          | -0.137          | -0.103          | 0.3000 |
| 0.4000                   | -0.119                    | -0.146          | -0.027          | -0.096          | -0.157          | -0.060          | -0.083          | -0.162          | -0.080          | -0.067          | -0.152          | -0.099          | -0.046          | -0.142          | -0.096          | 0.4000 |
| 0.5000                   | -0.120                    | -0.148          | -0.028          | -0.105          | -0.158          | -0.053          | -0.092          | -0.160          | -0.068          | -0.080          | -0.158          | -0.091          | -0.059          | -0.146          | -0.087          | 0.5000 |
| 0.6000                   | -0.122                    | -0.151          | -0.029          | -0.061          | -0.155          | -0.094          | -0.100          | -0.158          | -0.057          | -0.089          | -0.157          | -0.068          | -0.078          | -0.122          | -0.043          | 0.6000 |
| 0.7000                   | -0.125                    | -0.151          | -0.027          | -0.111          | -0.148          | -0.037          | -0.100          | -0.156          |                 | -0.094          | -0.161          | -0.066          | -0.085          | -0.121          | -0.037          | 0.7000 |
| 0.8000                   | -0.125                    | -0.151          | -0.027          | -0.111          | -0.148          | -0.037          | -0.100          | -0.156          |                 | -0.094          | -0.161          | -0.066          | -0.085          | -0.121          | -0.037          | 0.8000 |
| 1.0000                   | -0.119                    | -0.024          | 0.095           | 0.000           | -0.044          | -0.044          | -0.065          | -0.126          | -0.060          | -0.091          | -0.137          | -0.046          | -0.089          | -0.115          | -0.025          | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Concluded

| x/c                      | y/b=0.150                |        |        | y/b=0.300 |        |        | y/b=0.450 |        |        | y/b=0.600 |        |        | y/b=0.750 |        |        | x/c    |
|--------------------------|--------------------------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|--------|
|                          | CpL                      | CpR    | ΔCp    | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    |        |
|                          | M = 2.233      α = 12.19 |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                   | -0.030                   | -0.162 | -0.132 | -0.005    | -0.137 | -0.132 | -0.164    | -0.132 | 0.032  | 0.080     | -0.190 | -0.269 | 0.113     | -0.174 | -0.288 | 0.0000 |
| 0.0250                   | -0.055                   | -0.170 | -0.115 | -0.036    | -0.177 | -0.141 | -0.055    | -0.170 | -0.115 | 0.034     | -0.189 | -0.224 |           |        |        | 0.0250 |
| 0.0500                   | -0.077                   | -0.175 | -0.098 | -0.059    | -0.200 | -0.141 | 0.001     | -0.193 | -0.194 | 0.001     | -0.189 | -0.190 | 0.030     | -0.168 | -0.197 | 0.0500 |
| 0.1000                   | -0.114                   | -0.177 | -0.063 | -0.081    | -0.193 | -0.112 | -0.043    | -0.195 | -0.152 | -0.029    | -0.189 | -0.159 | -0.017    | -0.163 | -0.146 | 0.1000 |
| 0.1500                   | -0.130                   | -0.180 | -0.050 | -0.094    | -0.192 | -0.098 | -0.068    | -0.196 | -0.128 | -0.049    | -0.188 | -0.139 | -0.028    | -0.161 | -0.133 | 0.1500 |
| 0.2000                   | -0.134                   | -0.183 | -0.049 | -0.107    | -0.195 | -0.088 | -0.083    | -0.197 | -0.115 | -0.063    | -0.185 | -0.122 | -0.040    | -0.159 | -0.118 | 0.2000 |
| 0.3000                   | -0.146                   | -0.184 | -0.038 | -0.121    | -0.197 | -0.076 | -0.097    | -0.198 | -0.102 | -0.076    | -0.181 | -0.105 | -0.056    | -0.156 | -0.100 | 0.3000 |
| 0.4000                   | -0.149                   | -0.179 | -0.030 | -0.128    | -0.200 | -0.072 | -0.111    | -0.197 | -0.086 | -0.089    | -0.174 | -0.086 | -0.068    | -0.154 | -0.086 | 0.4000 |
| 0.5000                   | -0.152                   | -0.172 | -0.020 | -0.134    | -0.198 | -0.064 | -0.122    | -0.188 | -0.066 | -0.100    | -0.161 | -0.061 | -0.078    | -0.153 | -0.025 | 0.5000 |
| 0.6000                   | -0.154                   | -0.171 | -0.017 | -0.087    | -0.198 | -0.111 | -0.125    | -0.174 | -0.048 | -0.108    | -0.149 | -0.042 | -0.085    | -0.095 | -0.010 | 0.6000 |
| 0.7000                   | -0.158                   | -0.173 | -0.014 | -0.126    | -0.189 | -0.063 | -0.151    | -0.126 | -0.002 | -0.113    | -0.140 | -0.027 | -0.093    | -0.093 |        | 0.7000 |
| 0.8000                   | -0.156                   | -0.124 | 0.031  | -0.148    | -0.174 | -0.025 | -0.124    | -0.126 | -0.002 | -0.116    | -0.140 | -0.024 |           |        |        | 0.8000 |
| 1.0000                   | -0.128                   | 0.123  | 0.251  | -0.139    | -0.121 | 0.019  | -0.111    | -0.064 | 0.047  | -0.114    | -0.162 | -0.047 | -0.115    | -0.126 | -0.011 | 1.0000 |
| M = 2.227      α = 16.22 |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                   | -0.175                   | -0.184 | -0.009 | -0.012    | -0.171 | -0.159 | -0.165    | -0.165 | -0.007 | -0.203    | -0.196 | 0.016  | -0.209    | -0.225 |        | 0.0000 |
| 0.0250                   | -0.173                   | -0.180 | -0.007 | -0.062    | -0.197 | -0.135 | -0.041    | -0.193 | -0.151 | -0.034    | -0.205 | -0.170 |           |        |        | 0.0250 |
| 0.0500                   | -0.171                   | -0.179 | -0.008 | -0.096    | -0.212 | -0.116 | -0.070    | -0.209 | -0.139 | -0.055    | -0.206 | -0.151 | -0.033    | -0.202 | -0.170 | 0.0500 |
| 0.1000                   | -0.169                   | -0.188 | -0.019 | -0.118    | -0.208 | -0.090 | -0.089    | -0.209 | -0.120 | -0.074    | -0.205 | -0.130 | -0.061    | -0.198 | -0.137 | 0.1000 |
| 0.1500                   | -0.184                   | -0.189 | -0.005 | -0.128    | -0.207 | -0.079 | -0.103    | -0.210 | -0.107 | -0.086    | -0.204 | -0.118 | -0.069    | -0.196 | -0.127 | 0.1500 |
| 0.2000                   | -0.184                   | -0.186 | -0.002 | -0.136    | -0.206 | -0.069 | -0.115    | -0.210 | -0.095 | -0.096    | -0.204 | -0.108 | -0.079    | -0.193 | -0.114 | 0.2000 |
| 0.3000                   | -0.186                   | -0.183 | 0.003  | -0.148    | -0.208 | -0.060 | -0.130    | -0.212 | -0.082 | -0.108    | -0.204 | -0.098 | -0.090    | -0.188 | -0.099 | 0.3000 |
| 0.4000                   | -0.187                   | -0.172 | 0.015  | -0.153    | -0.211 | -0.059 | -0.134    | -0.212 | -0.077 | -0.117    | -0.203 | -0.086 | -0.099    | -0.184 | -0.085 | 0.4000 |
| 0.5000                   | -0.186                   | -0.157 | 0.029  | -0.160    | -0.213 | -0.053 | -0.146    | -0.207 | -0.061 | -0.126    | -0.198 | -0.072 | -0.109    | -0.114 | -0.005 | 0.5000 |
| 0.6000                   | -0.179                   | -0.159 | 0.019  | -0.108    | -0.211 | -0.103 | -0.149    | -0.203 | -0.054 | -0.132    | -0.188 | -0.056 | -0.115    | -0.089 | 0.026  | 0.6000 |
| 0.7000                   | -0.178                   | -0.162 | 0.016  | -0.160    | -0.185 | -0.025 | -0.195    | -0.195 |        | -0.136    | -0.167 | -0.031 | -0.119    | -0.078 | 0.041  | 0.7000 |
| 0.8000                   | -0.158                   | -0.122 | 0.037  | -0.173    | -0.172 | 0.001  | -0.121    | -0.186 | -0.065 | -0.137    | -0.141 | -0.003 |           |        |        | 0.8000 |
| 1.0000                   | -0.065                   | 0.087  | 0.152  | -0.085    | -0.189 | -0.104 | -0.051    | -0.165 | -0.115 | -0.133    | -0.070 | 0.063  | -0.122    | -0.128 | -0.006 | 1.0000 |
|                          |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
|                          |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
|                          |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
|                          |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
|                          |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
|                          |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
|                          |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
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TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued

(b) BVWC;  $\delta = -0.5^\circ$

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| x/c                       | y/b=0.150                 |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub>           | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
|                           | M = 0.700      α = -04.28 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.187                    | 0.079           | 0.266           | -0.224          | -0.010          | 0.214           | -0.251          | 0.098           | 0.350           | -0.104          | 0.022           | 0.126           | -0.278          | -0.094          | 0.184           | 0.0000 |
| 0.0250                    | -0.169                    | 0.023           | 0.192           | -0.216          | -0.037          | 0.179           | -0.232          | 0.012           | 0.244           | -0.190          | -0.009          | 0.181           | -0.237          | -0.070          | 0.167           | 0.0250 |
| 0.0500                    | -0.157                    | -0.019          | 0.138           | -0.203          | -0.057          | 0.146           | -0.213          | -0.042          | 0.171           | -0.233          | -0.032          | 0.201           | -0.237          | -0.070          | 0.167           | 0.0500 |
| 0.1000                    | -0.153                    | -0.065          | 0.088           | -0.166          | -0.077          | 0.089           | -0.174          | -0.052          | 0.122           | -0.190          | -0.049          | 0.141           | -0.202          | -0.058          | 0.143           | 0.1000 |
| 0.1500                    | -0.142                    | -0.070          | 0.072           | -0.155          | -0.075          | 0.080           | -0.153          | -0.063          | 0.090           | -0.163          | -0.055          | 0.108           | -0.172          | -0.059          | 0.113           | 0.1500 |
| 0.2000                    | -0.137                    | -0.078          | 0.058           | -0.144          | -0.078          | 0.066           | -0.143          | -0.068          | 0.075           | -0.145          | -0.059          | 0.086           | -0.143          | -0.064          | 0.079           | 0.2000 |
| 0.3000                    | -0.132                    | -0.093          | 0.039           | -0.124          | -0.077          | 0.047           | -0.117          | -0.068          | 0.049           | -0.124          | -0.065          | 0.059           | -0.128          | -0.069          | 0.059           | 0.3000 |
| 0.4000                    | -0.114                    | -0.085          | 0.029           | -0.105          | -0.069          | 0.037           | -0.100          | -0.064          | 0.036           | -0.106          | -0.067          | 0.039           | -0.106          | -0.064          | 0.043           | 0.4000 |
| 0.5000                    | -0.085                    | -0.066          | 0.019           | -0.082          | -0.052          | 0.030           | -0.083          | -0.053          | 0.030           | -0.092          | -0.062          | 0.030           | -0.097          | -0.057          | 0.040           | 0.5000 |
| 0.6000                    | -0.053                    | -0.044          | 0.009           | -0.052          | -0.041          | 0.011           | -0.056          | -0.046          | 0.010           | -0.070          | -0.059          | 0.011           | -0.087          | -0.048          | 0.038           | 0.6000 |
| 0.7000                    | -0.022                    | -0.026          | -0.004          | -0.004          | -0.031          | -0.038          | -0.007          | -0.051          | -0.048          | -0.030          | -0.037          | -0.007          | -0.074          | -0.045          | 0.028           | 0.7000 |
| 0.8000                    | -0.005                    | -0.013          | -0.007          | -0.010          | -0.032          | -0.023          | -0.015          | -0.048          | -0.033          | -0.030          | -0.037          | -0.007          | -0.074          | -0.045          | 0.028           | 0.8000 |
| 1.0000                    | -0.013                    | 0.012           | 0.012           | 0.031           | -0.013          | -0.044          | 0.006           | -0.018          | -0.024          | -0.047          | 0.028           | 0.075           | -0.021          | -0.069          | -0.048          | 1.0000 |
| M = 0.698      α = -00.15 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.027                     | -0.229          | -0.256          | 0.023           | -0.365          | -0.388          | 0.085           | -0.266          | -0.351          | 0.053           | -0.316          | -0.369          | -0.025          | -0.276          | -0.251          | 0.0000 |
| 0.0250                    | -0.037                    | -0.220          | -0.183          | -0.052          | -0.295          | -0.244          | -0.013          | -0.251          | -0.238          | -0.017          | -0.248          | -0.231          | -0.059          | -0.216          | -0.157          | 0.0250 |
| 0.0500                    | -0.083                    | -0.215          | -0.132          | -0.098          | -0.245          | -0.147          | -0.073          | -0.234          | -0.160          | -0.062          | -0.201          | -0.139          | -0.097          | -0.174          | -0.097          | 0.0500 |
| 0.1000                    | -0.121                    | -0.217          | -0.096          | -0.108          | -0.207          | -0.099          | -0.082          | -0.194          | -0.112          | -0.074          | -0.171          | -0.107          | -0.077          | -0.148          | -0.070          | 0.1000 |
| 0.1500                    | -0.127                    | -0.188          | -0.061          | -0.113          | -0.185          | -0.072          | -0.088          | -0.171          | -0.083          | -0.079          | -0.150          | -0.071          | -0.077          | -0.148          | -0.070          | 0.1500 |
| 0.2000                    | -0.125                    | -0.176          | -0.051          | -0.112          | -0.172          | -0.061          | -0.090          | -0.157          | -0.067          | -0.078          | -0.138          | -0.060          | -0.076          | -0.136          | -0.061          | 0.2000 |
| 0.3000                    | -0.128                    | -0.180          | -0.052          | -0.102          | -0.148          | -0.046          | -0.079          | -0.140          | -0.061          | -0.071          | -0.122          | -0.052          | -0.072          | -0.127          | -0.054          | 0.3000 |
| 0.4000                    | -0.109                    | -0.145          | -0.036          | -0.086          | -0.120          | -0.034          | -0.071          | -0.115          | -0.044          | -0.067          | -0.108          | -0.042          | -0.069          | -0.112          | -0.042          | 0.4000 |
| 0.5000                    | -0.079                    | -0.108          | -0.029          | -0.069          | -0.086          | -0.018          | -0.061          | -0.087          | -0.026          | -0.061          | -0.097          | -0.036          | -0.069          | -0.086          | -0.017          | 0.5000 |
| 0.6000                    | -0.047                    | -0.064          | -0.017          | -0.045          | -0.060          | -0.015          | -0.037          | -0.068          | -0.030          | -0.044          | -0.086          | -0.042          | -0.064          | -0.069          | -0.005          | 0.6000 |
| 0.7000                    | -0.018                    | -0.038          | -0.020          | -0.025          | -0.058          | -0.033          | -0.013          | -0.059          | -0.046          | -0.033          | -0.070          | -0.037          | -0.057          | -0.055          | 0.002           | 0.7000 |
| 0.8000                    | -0.001                    | -0.024          | -0.024          | -0.003          | -0.047          | -0.044          | -0.013          | -0.059          | -0.046          | -0.024          | -0.051          | -0.026          | -0.057          | -0.055          | 0.8000          |        |
| 1.0000                    | 0.001                     | -0.031          | -0.032          | 0.042           | -0.001          | -0.044          | -0.017          | -0.007          | 0.011           | -0.011          | -0.001          | 0.010           | -0.030          | -0.034          | -0.005          | 1.0000 |
| M = 0.696      α = 03.68  |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.043                     | -0.364          | -0.407          | 0.082           | -0.508          | -0.590          | 0.226           | -0.512          | -0.737          | 0.136           | -0.423          | -0.559          | 0.142           | -0.924          | -1.066          | 0.0000 |
| 0.0250                    | -0.033                    | -0.326          | -0.293          | -0.005          | -0.413          | -0.409          | 0.089           | -0.430          | -0.619          | 0.077           | -0.457          | -0.534          | 0.051           | -0.431          | -0.482          | 0.0250 |
| 0.0500                    | -0.088                    | -0.299          | -0.212          | -0.061          | -0.343          | -0.282          | 0.001           | -0.360          | -0.361          | 0.034           | -0.433          | -0.468          | -0.011          | -0.419          | -0.419          | 0.0500 |
| 0.1000                    | -0.132                    | -0.276          | -0.144          | -0.087          | -0.279          | -0.192          | -0.029          | -0.253          | -0.224          | -0.004          | -0.213          | -0.209          | -0.022          | -0.191          | -0.191          | 0.1000 |
| 0.1500                    | -0.141                    | -0.239          | -0.099          | -0.094          | -0.225          | -0.130          | -0.043          | -0.215          | -0.171          | -0.022          | -0.191          | -0.169          | -0.011          | -0.204          | -0.194          | 0.1500 |
| 0.2000                    | -0.142                    | -0.220          | -0.078          | -0.094          | -0.196          | -0.102          | -0.054          | -0.194          | -0.140          | -0.030          | -0.176          | -0.146          | -0.019          | -0.181          | -0.162          | 0.2000 |
| 0.3000                    | -0.133                    | -0.206          | -0.074          | -0.088          | -0.163          | -0.076          | -0.049          | -0.143          | -0.094          | -0.032          | -0.157          | -0.126          | -0.026          | -0.152          | -0.126          | 0.3000 |
| 0.4000                    | -0.109                    | -0.162          | -0.054          | -0.070          | -0.139          | -0.069          | -0.044          | -0.129          | -0.085          | -0.034          | -0.125          | -0.092          | -0.035          | -0.122          | -0.087          | 0.4000 |
| 0.5000                    | -0.076                    | -0.116          | -0.041          | -0.051          | -0.096          | -0.044          | -0.039          | -0.101          | -0.063          | -0.031          | -0.101          | -0.071          | -0.038          | -0.095          | -0.058          | 0.5000 |
| 0.6000                    | -0.039                    | -0.066          | -0.027          | -0.030          | -0.069          | -0.039          | -0.021          | -0.077          | -0.057          | -0.026          | -0.094          | -0.068          | -0.038          | -0.065          | -0.027          | 0.6000 |
| 0.7000                    | -0.009                    | -0.037          | -0.029          | -0.011          | -0.060          | -0.048          | -0.075          | -0.077          | -0.057          | -0.020          | -0.081          | -0.062          | -0.037          | -0.060          | -0.023          | 0.7000 |
| 0.8000                    | 0.008                     | -0.017          | -0.025          | 0.007           | -0.044          | -0.051          | -0.050          | -0.050          | -0.050          | -0.018          | -0.049          | -0.031          | -0.037          | -0.049          | 0.8000          |        |
| 1.0000                    | -0.001                    | -0.002          | -0.002          | 0.041           | -0.038          | -0.044          | -0.001          | 0.065           | 0.066           | -0.031          | 0.073           | 0.104           | -0.033          | -0.201          | -0.167          | 1.0000 |
| M = 0.695      α = 07.85  |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.534                    | 0.022           | 0.556           | -0.178          | -0.280          | -0.101          | 0.109           | -0.380          | -0.489          | 0.090           | -0.417          | -0.507          | -0.190          | -1.176          | -0.986          | 0.0000 |
| 0.0250                    | -0.450                    | -0.070          | 0.380           | -0.218          | -0.259          | -0.041          | -0.007          | -0.325          | -0.317          | 0.070           | -0.460          | -0.530          | -0.021          | -0.583          | -0.562          | 0.0250 |
| 0.0500                    | -0.387                    | -0.139          | 0.248           | -0.237          | -0.243          | -0.006          | -0.079          | -0.287          | -0.208          | 0.047           | -0.457          | -0.504          | -0.046          | -0.270          | -0.316          | 0.0500 |
| 0.1000                    | -0.327                    | -0.206          | 0.120           | -0.211          | -0.226          | -0.015          | -0.088          | -0.266          | -0.178          | -0.004          | -0.310          | -0.306          | 0.046           | -0.239          | -0.249          | 0.1000 |
| 0.1500                    | -0.277                    | -0.204          | 0.073           | -0.199          | -0.203          | -0.004          | -0.090          | -0.224          | -0.133          | -0.029          | -0.228          | -0.199          | -0.011          | -0.239          | -0.249          | 0.1500 |
| 0.2000                    | -0.250                    | -0.202          | 0.048           | -0.182          | -0.192          | -0.010          | -0.092          | -0.193          | -0.101          | -0.037          | -0.196          | -0.159          | -0.003          | -0.228          | -0.225          | 0.2000 |
| 0.3000                    | -0.198                    | -0.198          | 0.000           | -0.147          | -0.167          | -0.020          | -0.077          | -0.158          | -0.081          | -0.039          | -0.180          | -0.141          | -0.018          | -0.177          | -0.159          | 0.3000 |
| 0.4000                    | -0.142                    | -0.163          | -0.021          | -0.109          | -0.138          | -0.028          | -0.063          | -0.133          | -0.070          | -0.039          | -0.149          | -0.110          | -0.029          | -0.155          | -0.126          | 0.4000 |
| 0.5000                    | -0.086                    | -0.117          | -0.032          | -0.070          | -0.092          | -0.022          | -0.051          | -0.118          | -0.067          | -0.041          | -0.127          | -0.085          | -0.032          | -0.120          | -0.089          | 0.5000 |
| 0.6000                    | -0.038                    | -0.059          | -0.021          | -0.040          | -0.064          | -0.025          | -0.030          | -0.090          | -0.060          | -0.037          | -0.108          | -0.071          | -0.034          | -0.088          | -0.054          | 0.6000 |
| 0.7000                    | -0.002                    | -0.032          | -0.030          | -0.021          | -0.063          | -0.042          | -0.027          | -0.087          | -0.067          | -0.027          | -0.096          | -0.070          | -0.041          | -0.070          | -0.028          | 0.7000 |
| 0.8000                    | 0.015                     | -0.018          | -0.033          | -0.004          | -0.051          | -0.048          | -0.010          | -0.079          | -0.068          | -0.023          | -0.071          | -0.049          | -0.023          | -0.071          | -0.049          | 0.8000 |
| 1.0000                    | -0.009                    | -0.028          | -0.019          | 0.030           | -0.004          | -0.027          | -0.022          | -0.049          | -0.027          | -0.032          | 0.021           | 0.052           | -0.090          | -0.104          | -0.013          | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| x/c                        | y/b=0.150       |                 |              | y/b=0.300       |                 |              | y/b=0.450       |                 |              | y/b=0.600       |                 |              | y/b=0.750       |                 |              | x/c    |
|----------------------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|--------|
|                            | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ |        |
| M = 0.700 $\alpha = 11.79$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                     | -1.349          | 0.481           | 1.830        | -0.861          | 0.013           | 0.874        | -0.196          | -0.161          | 0.035        | 0.086           | -0.502          | -0.588       | 0.163           | -1.248          | -1.411       | 0.0000 |
| 0.0250                     | -1.282          | 0.304           | 1.585        | -0.732          | -0.068          | 0.664        | -0.241          | -0.200          | 0.041        | 0.012           | -0.400          | -0.412       |                 |                 |              | 0.0250 |
| 0.0500                     | -1.196          | 0.159           | 1.356        | -0.621          | -0.126          | 0.495        | -0.262          | -0.220          | 0.042        | -0.040          | -0.325          | -0.285       | 0.064           | -0.638          | -0.703       | 0.0500 |
| 0.1000                     | -0.973          | -0.032          | 0.941        | -0.448          | -0.171          | 0.277        | -0.232          | -0.204          | 0.027        | -0.082          | -0.259          | -0.177       | 0.006           | -0.314          | -0.321       | 0.1000 |
| 0.1500                     | -0.765          | -0.097          | 0.669        | -0.383          | -0.174          | 0.209        | -0.214          | -0.192          | 0.021        | -0.082          | -0.216          | -0.135       | -0.010          | -0.276          | -0.265       | 0.1500 |
| 0.2000                     | -0.610          | -0.131          | 0.478        | -0.336          | -0.176          | 0.161        | -0.198          | -0.166          | 0.011        | -0.084          | -0.204          | -0.120       | -0.017          | -0.247          | -0.230       | 0.2000 |
| 0.3000                     | -0.428          | -0.173          | 0.255        | -0.253          | -0.166          | 0.087        | -0.163          | -0.166          | -0.001       | -0.080          | -0.191          | -0.111       | -0.028          | -0.209          | -0.181       | 0.3000 |
| 0.4000                     | -0.317          | -0.163          | 0.154        | -0.178          | -0.147          | 0.031        | -0.135          | -0.153          | -0.018       | -0.075          | -0.172          | -0.097       | -0.042          | -0.183          | -0.142       | 0.4000 |
| 0.5000                     | -0.232          | -0.129          | 0.103        | -0.113          | -0.120          | -0.007       | -0.113          | -0.126          | -0.013       | -0.070          | -0.150          | -0.080       | -0.046          | -0.150          | -0.103       | 0.5000 |
| 0.6000                     | -0.158          | -0.089          | 0.069        | -0.065          | -0.094          | -0.029       | -0.091          | -0.117          | -0.026       | -0.066          | -0.145          | -0.079       | -0.049          | -0.124          | -0.075       | 0.6000 |
| 0.7000                     | -0.097          | -0.053          | 0.044        | -0.044          | -0.096          | -0.052       | -0.116          | -0.116          | -0.054       | -0.054          | -0.130          | -0.075       | -0.059          | -0.110          | -0.051       | 0.7000 |
| 0.8000                     | -0.060          | -0.031          | 0.029        | -0.028          | -0.093          | -0.065       | -0.054          | -0.108          | -0.054       | -0.052          | -0.106          | -0.054       |                 |                 |              | 0.8000 |
| 1.0000                     | -0.056          | -0.087          | -0.031       | -0.012          | -0.068          | -0.056       | -0.028          | -0.066          | -0.038       | -0.073          | -0.032          | 0.041        | -0.140          | -0.146          | -0.005       | 1.0000 |
| M = 0.702 $\alpha = 15.91$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                     | -0.851          | 0.802           | 1.653        | -1.160          | -0.092          | 1.067        | -0.712          | -0.426          | 0.287        | -0.528          | -0.535          | -0.008       | -0.247          | -0.802          | -0.555       | 0.0000 |
| 0.0250                     | -0.837          | 0.669           | 1.506        | -1.046          | -0.194          | 0.852        | -0.748          | -0.417          | 0.331        | -0.536          | -0.477          | 0.059        |                 |                 |              | 0.0250 |
| 0.0500                     | -0.839          | 0.523           | 1.362        | -0.955          | -0.267          | 0.688        | -0.755          | -0.408          | 0.347        | -0.541          | -0.441          | 0.100        | -0.262          | -0.642          | -0.380       | 0.0500 |
| 0.1000                     | -0.850          | 0.192           | 1.083        | -0.842          | -0.330          | 0.512        | -0.688          | -0.393          | 0.295        | -0.537          | -0.433          | 0.105        | -0.275          | -0.544          | -0.269       | 0.1000 |
| 0.1500                     | -0.949          | 0.006           | 0.955        | -0.786          | -0.322          | 0.464        | -0.653          | -0.373          | 0.279        | -0.532          | -0.411          | 0.122        | -0.287          | -0.509          | -0.222       | 0.1500 |
| 0.2000                     | -0.960          | -0.101          | 0.859        | -0.747          | -0.325          | 0.422        | -0.640          | -0.370          | 0.270        | -0.528          | -0.397          | 0.131        | -0.291          | -0.454          | -0.163       | 0.2000 |
| 0.3000                     | -0.834          | -0.255          | 0.580        | -0.685          | -0.323          | 0.362        | -0.607          | -0.339          | 0.267        | -0.500          | -0.369          | 0.131        | -0.288          | -0.404          | -0.116       | 0.3000 |
| 0.4000                     | -0.694          | -0.284          | 0.410        | -0.647          | -0.310          | 0.337        | -0.588          | -0.329          | 0.259        | -0.486          | -0.356          | 0.130        | -0.289          | -0.364          | -0.076       | 0.4000 |
| 0.5000                     | -0.630          | -0.268          | 0.362        | -0.614          | -0.275          | 0.340        | -0.563          | -0.305          | 0.254        | -0.455          | -0.347          | 0.108        | -0.275          | -0.321          | -0.046       | 0.5000 |
| 0.6000                     | -0.598          | -0.236          | 0.361        | -0.584          | -0.256          | 0.328        | -0.534          | -0.302          | 0.232        | -0.419          | -0.335          | 0.084        | -0.250          | -0.277          | -0.027       | 0.6000 |
| 0.7000                     | -0.568          | -0.219          | 0.349        | -0.560          | -0.274          | 0.286        | -0.514          | -0.314          |              | -0.385          | -0.316          | 0.068        | -0.237          | -0.253          | -0.016       | 0.7000 |
| 0.8000                     | -0.539          | -0.227          | 0.312        | -0.524          | -0.291          | 0.234        | -0.466          | -0.317          | 0.148        | -0.349          | -0.291          | 0.059        |                 |                 |              | 0.8000 |
| 1.0000                     | -0.478          | -0.316          | 0.161        | -0.422          | -0.320          | 0.102        | -0.385          | -0.298          | 0.087        | -0.276          | -0.219          | 0.057        | -0.273          | -0.313          | -0.040       | 1.0000 |
| M = 0.905 $\alpha = 03.73$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                     | -0.011          | -0.361          | -0.351       | -0.013          | -0.648          | -0.635       | 0.129           | -0.614          | -0.743       | 0.199           | -0.435          | -0.634       | 0.123           | -0.919          | -1.042       | 0.0000 |
| 0.0250                     | -0.080          | -0.359          | -0.278       | -0.116          | -0.553          | -0.437       | 0.023           | -0.547          | -0.570       | 0.098           | -0.498          | -0.596       |                 |                 |              | 0.0250 |
| 0.0500                     | -0.137          | -0.356          | -0.220       | -0.183          | -0.484          | -0.301       | -0.045          | -0.476          | -0.431       | 0.031           | -0.489          | -0.519       | 0.048           | -0.488          | -0.536       | 0.0500 |
| 0.1000                     | -0.210          | -0.354          | -0.144       | -0.209          | -0.422          | -0.213       | -0.066          | -0.319          | -0.253       | -0.006          | -0.257          | -0.251       | 0.003           | -0.259          | -0.262       | 0.1000 |
| 0.1500                     | -0.231          | -0.355          | -0.124       | -0.216          | -0.386          | -0.170       | -0.070          | -0.208          | -0.138       | -0.029          | -0.214          | -0.184       | -0.011          | -0.230          | -0.219       | 0.1500 |
| 0.2000                     | -0.250          | -0.347          | -0.097       | -0.202          | -0.362          | -0.159       | -0.071          | -0.207          | -0.136       | -0.031          | -0.195          | -0.164       | -0.023          | -0.200          | -0.177       | 0.2000 |
| 0.3000                     | -0.262          | -0.362          | -0.100       | -0.141          | -0.192          | -0.050       | -0.059          | -0.170          | -0.111       | -0.036          | -0.164          | -0.128       | -0.027          | -0.177          | -0.151       | 0.3000 |
| 0.4000                     | -0.231          | -0.293          | -0.062       | -0.094          | -0.154          | -0.060       | -0.049          | -0.140          | -0.091       | -0.041          | -0.141          | -0.100       | -0.036          | -0.157          | -0.120       | 0.4000 |
| 0.5000                     | -0.116          | -0.139          | -0.022       | -0.049          | -0.106          | -0.057       | -0.046          | -0.108          | -0.062       | -0.040          | -0.124          | -0.083       | -0.039          | -0.118          | -0.079       | 0.5000 |
| 0.6000                     | -0.054          | -0.081          | -0.028       | -0.023          | -0.077          | -0.054       | -0.031          | -0.093          | -0.062       | -0.032          | -0.117          | -0.085       | -0.040          | -0.091          | -0.051       | 0.6000 |
| 0.7000                     | -0.007          | -0.042          | -0.035       | -0.020          | -0.072          | -0.053       | -0.089          | -0.089          | -0.062       | -0.024          | -0.092          | -0.068       | -0.046          | -0.079          | -0.033       | 0.7000 |
| 0.8000                     | 0.008           | -0.029          | -0.036       | -0.006          | -0.061          | -0.055       | -0.012          | -0.065          | -0.053       | -0.018          | -0.065          | -0.047       |                 |                 |              | 0.8000 |
| 1.0000                     | -0.061          | -0.080          | -0.019       | 0.051           | -0.020          | -0.071       | -0.007          | 0.043           | 0.050        | -0.018          | -0.011          | 0.006        | -0.094          | -0.135          | -0.041       | 1.0000 |
| M = 0.955 $\alpha = 03.78$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                     | -0.075          | -0.372          | -0.297       | -0.023          | -0.653          | -0.630       | 0.060           | -0.748          | -0.808       | 0.068           | -0.676          | -0.744       | 0.235           | -0.530          | -0.765       | 0.0000 |
| 0.0250                     | -0.125          | -0.396          | -0.271       | -0.121          | -0.563          | -0.442       | -0.080          | -0.657          | -0.576       | -0.025          | -0.669          | -0.643       |                 |                 |              | 0.0250 |
| 0.0500                     | -0.164          | -0.400          | -0.235       | -0.188          | -0.499          | -0.311       | -0.173          | -0.593          | -0.420       | -0.077          | -0.651          | -0.574       | 0.137           | -0.391          | -0.528       | 0.0500 |
| 0.1000                     | -0.214          | -0.347          | -0.134       | -0.231          | -0.450          | -0.220       | -0.213          | -0.548          | -0.335       | -0.054          | -0.582          | -0.528       | 0.079           | -0.283          | -0.362       | 0.1000 |
| 0.1500                     | -0.243          | -0.361          | -0.118       | -0.252          | -0.422          | -0.170       | -0.259          | -0.475          | -0.216       | -0.017          | -0.525          | -0.240       | 0.059           | -0.207          | -0.267       | 0.1500 |
| 0.2000                     | -0.251          | -0.358          | -0.108       | -0.274          | -0.410          | -0.136       | -0.259          | -0.451          | -0.192       | 0.002           | -0.121          | -0.123       | 0.047           | -0.166          | -0.213       | 0.2000 |
| 0.3000                     | -0.280          | -0.385          | -0.104       | -0.304          | -0.426          | -0.122       | -0.197          | -0.376          | -0.189       | 0.031           | -0.089          | -0.119       | 0.027           | -0.136          | -0.163       | 0.3000 |
| 0.4000                     | -0.305          | -0.401          | -0.096       | -0.280          | -0.443          | -0.162       | -0.024          | -0.085          | -0.061       | 0.030           | -0.053          | -0.083       | 0.016           | -0.113          | -0.129       | 0.4000 |
| 0.5000                     | -0.296          | -0.387          | -0.091       | -0.191          | -0.148          | 0.043        | 0.032           | -0.014          | -0.045       | 0.023           | -0.055          | -0.078       | 0.010           | -0.092          | -0.102       | 0.5000 |
| 0.6000                     | -0.210          | -0.191          | 0.019        | 0.043           | -0.024          | -0.067       | 0.033           | -0.009          | -0.042       | 0.021           | -0.058          | -0.079       | 0.004           | -0.061          | -0.065       | 0.6000 |
| 0.7000                     | -0.003          | -0.040          | -0.037       | 0.042           | -0.006          | -0.048       | -0.025          |                 | 0.027        | 0.043           | -0.069          | -0.009       | -0.045          | -0.035          |              | 0.7000 |
| 0.8000                     | 0.050           | 0.008           | -0.042       | 0.042           | -0.004          | -0.045       | 0.036           | -0.023          | -0.059       | 0.024           | -0.016          | -0.040       |                 |                 |              | 0.8000 |
| 1.0000                     | -0.312          | -0.211          | 0.101        | 0.045           | -0.046          | -0.092       | 0.039           | 0.034           | -0.005       | -0.008          | 0.067           | 0.075        | -0.097          | -0.086          | 0.012        | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

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| x/c                      | y/b=0.150                |        |        | y/b=0.300 |        |        | y/b=0.450 |        |        | y/b=0.600 |        |        | y/b=0.750 |        |        | x/c    |
|--------------------------|--------------------------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|--------|
|                          | CpL                      | CpR    | ΔCp    | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    |        |
|                          | M = 1.005      α = 03.88 |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                   | -0.086                   | -0.361 | -0.275 | -0.046    | -0.607 | -0.561 | 0.028     | -0.680 | -0.708 | -0.041    | -0.770 | -0.730 | -0.095    | -0.676 | -0.581 | 0.0000 |
| 0.0250                   | -0.125                   | -0.348 | -0.222 | -0.131    | -0.519 | -0.389 | -0.104    | -0.602 | -0.498 | -0.145    | -0.674 | -0.529 | -0.145    | -0.674 | -0.529 | 0.0250 |
| 0.0500                   | -0.158                   | -0.343 | -0.184 | -0.188    | -0.458 | -0.270 | -0.192    | -0.544 | -0.352 | -0.214    | -0.614 | -0.400 | -0.216    | -0.642 | -0.426 | 0.0500 |
| 0.1000                   | -0.207                   | -0.357 | -0.151 | -0.220    | -0.412 | -0.192 | -0.233    | -0.487 | -0.253 | -0.251    | -0.606 | -0.355 | -0.274    | -0.622 | -0.348 | 0.1000 |
| 0.1500                   | -0.239                   | -0.333 | -0.094 | -0.248    | -0.399 | -0.151 | -0.252    | -0.444 | -0.192 | -0.275    | -0.480 | -0.205 | -0.267    | -0.615 | -0.348 | 0.1500 |
| 0.2000                   | -0.249                   | -0.330 | -0.081 | -0.269    | -0.387 | -0.118 | -0.284    | -0.440 | -0.155 | -0.292    | -0.452 | -0.159 | -0.241    | -0.525 | -0.284 | 0.2000 |
| 0.3000                   | -0.272                   | -0.364 | -0.091 | -0.292    | -0.403 | -0.111 | -0.306    | -0.443 | -0.137 | -0.306    | -0.511 | -0.204 | -0.173    | -0.446 | -0.272 | 0.3000 |
| 0.4000                   | -0.291                   | -0.377 | -0.086 | -0.324    | -0.449 | -0.125 | -0.327    | -0.462 | -0.135 | -0.246    | -0.401 | -0.156 | -0.114    | -0.307 | -0.192 | 0.4000 |
| 0.5000                   | -0.304                   | -0.399 | -0.096 | -0.328    | -0.423 | -0.095 | -0.307    | -0.402 | -0.095 | -0.223    | -0.281 | -0.059 | -0.087    | -0.260 | -0.172 | 0.5000 |
| 0.6000                   | -0.328                   | -0.376 | -0.048 | -0.282    | -0.372 | -0.091 | -0.223    | -0.237 | -0.014 | -0.050    | -0.235 | -0.184 | -0.079    | -0.236 | -0.157 | 0.6000 |
| 0.7000                   | -0.290                   | -0.303 | -0.013 | -0.246    | -0.198 | -0.048 | -0.215    | -0.215 | -0.053 | -0.233    | -0.179 | -0.116 | -0.116    | -0.223 | -0.107 | 0.7000 |
| 0.8000                   | -0.119                   | -0.162 | -0.042 | -0.008    | -0.162 | -0.154 | -0.081    | -0.202 | -0.120 | -0.095    | -0.221 | -0.127 | -0.095    | -0.221 | -0.127 | 0.8000 |
| 1.0000                   | 0.618                    | 0.325  | -0.293 | 1.075     | -0.507 | -1.582 | 0.025     | -0.203 | -0.228 | -0.292    | -0.171 | 0.121  | -0.490    | -0.241 | 0.249  | 1.0000 |
| M = 1.044      α = 03.88 |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                   | -0.069                   | -0.320 | -0.251 | -0.013    | -0.501 | -0.488 | 0.059     | -0.584 | -0.643 | 0.013     | -0.694 | -0.707 | -0.084    | -0.623 | -0.539 | 0.0000 |
| 0.0250                   | -0.105                   | -0.324 | -0.219 | -0.102    | -0.445 | -0.343 | -0.071    | -0.535 | -0.464 | -0.098    | -0.602 | -0.503 | -0.098    | -0.602 | -0.503 | 0.0250 |
| 0.0500                   | -0.136                   | -0.322 | -0.186 | -0.161    | -0.404 | -0.242 | -0.157    | -0.494 | -0.337 | -0.177    | -0.544 | -0.367 | -0.194    | -0.590 | -0.396 | 0.0500 |
| 0.1000                   | -0.187                   | -0.300 | -0.113 | -0.190    | -0.361 | -0.171 | -0.197    | -0.430 | -0.233 | -0.236    | -0.533 | -0.297 | -0.256    | -0.572 | -0.316 | 0.1000 |
| 0.1500                   | -0.208                   | -0.310 | -0.102 | -0.210    | -0.346 | -0.136 | -0.225    | -0.402 | -0.177 | -0.255    | -0.481 | -0.226 | -0.268    | -0.568 | -0.300 | 0.1500 |
| 0.2000                   | -0.221                   | -0.269 | -0.049 | -0.231    | -0.347 | -0.116 | -0.236    | -0.397 | -0.161 | -0.261    | -0.431 | -0.170 | -0.270    | -0.527 | -0.257 | 0.2000 |
| 0.3000                   | -0.235                   | -0.312 | -0.077 | -0.253    | -0.359 | -0.106 | -0.277    | -0.395 | -0.119 | -0.280    | -0.461 | -0.182 | -0.225    | -0.445 | -0.230 | 0.3000 |
| 0.4000                   | -0.251                   | -0.330 | -0.079 | -0.289    | -0.392 | -0.104 | -0.290    | -0.446 | -0.155 | -0.273    | -0.443 | -0.165 | -0.178    | -0.379 | -0.201 | 0.4000 |
| 0.5000                   | -0.269                   | -0.358 | -0.090 | -0.285    | -0.390 | -0.104 | -0.298    | -0.382 | -0.083 | -0.218    | -0.385 | -0.166 | -0.141    | -0.265 | -0.124 | 0.5000 |
| 0.6000                   | -0.282                   | -0.352 | -0.071 | -0.265    | -0.359 | -0.095 | -0.239    | -0.344 | -0.105 | -0.187    | -0.209 | -0.021 | -0.040    | -0.228 | -0.188 | 0.6000 |
| 0.7000                   | -0.267                   | -0.294 | -0.028 | -0.225    | -0.245 | -0.020 | -0.171    | -0.171 | -0.026 | -0.201    | -0.175 | -0.062 | -0.205    | -0.143 | 0.7000 |        |
| 0.8000                   | -0.104                   | -0.159 | -0.055 | -0.044    | -0.141 | -0.097 | -0.057    | -0.175 | -0.118 | -0.067    | -0.185 | -0.118 | -0.067    | -0.185 | -0.118 | 0.8000 |
| 1.0000                   | 0.666                    | 0.344  | -0.322 | 0.742     | 0.035  | -0.707 | 0.209     | -0.715 | -0.924 | -0.762    | -0.132 | 0.630  | -0.873    | -0.228 | 0.645  | 1.0000 |
| M = 1.102      α = 03.93 |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                   | -0.020                   | -0.309 | -0.289 | 0.058     | -0.547 | -0.605 | 0.144     | -0.566 | -0.710 | 0.089     | -0.547 | -0.637 | -0.003    | -0.522 | -0.520 | 0.0000 |
| 0.0250                   | -0.046                   | -0.284 | -0.239 | -0.033    | -0.437 | -0.404 | 0.017     | -0.479 | -0.496 | -0.005    | -0.518 | -0.513 | -0.005    | -0.518 | -0.513 | 0.0250 |
| 0.0500                   | -0.071                   | -0.267 | -0.195 | -0.091    | -0.361 | -0.270 | -0.068    | -0.425 | -0.357 | -0.071    | -0.495 | -0.424 | -0.086    | -0.495 | -0.409 | 0.0500 |
| 0.1000                   | -0.123                   | -0.254 | -0.130 | -0.113    | -0.316 | -0.203 | -0.108    | -0.416 | -0.308 | -0.119    | -0.467 | -0.348 | -0.139    | -0.481 | -0.342 | 0.1000 |
| 0.1500                   | -0.135                   | -0.236 | -0.101 | -0.128    | -0.283 | -0.155 | -0.140    | -0.349 | -0.209 | -0.149    | -0.410 | -0.261 | -0.160    | -0.479 | -0.319 | 0.1500 |
| 0.2000                   | -0.146                   | -0.251 | -0.106 | -0.149    | -0.268 | -0.119 | -0.149    | -0.302 | -0.153 | -0.157    | -0.297 | -0.140 | -0.164    | -0.429 | -0.265 | 0.2000 |
| 0.3000                   | -0.154                   | -0.250 | -0.096 | -0.172    | -0.264 | -0.092 | -0.186    | -0.290 | -0.104 | -0.173    | -0.347 | -0.174 | -0.129    | -0.360 | -0.230 | 0.3000 |
| 0.4000                   | -0.168                   | -0.259 | -0.090 | -0.207    | -0.287 | -0.080 | -0.191    | -0.337 | -0.147 | -0.168    | -0.338 | -0.171 | -0.067    | -0.294 | -0.227 | 0.4000 |
| 0.5000                   | -0.197                   | -0.264 | -0.067 | -0.198    | -0.292 | -0.094 | -0.199    | -0.291 | -0.092 | -0.127    | -0.276 | -0.150 | -0.031    | -0.166 | -0.135 | 0.5000 |
| 0.6000                   | -0.202                   | -0.261 | -0.059 | -0.176    | -0.269 | -0.093 | -0.141    | -0.257 | -0.115 | -0.073    | -0.156 | -0.083 | 0.060     | -0.110 | -0.170 | 0.6000 |
| 0.7000                   | -0.182                   | -0.219 | -0.036 | -0.137    | -0.168 | -0.030 | -0.086    | -0.086 | -0.072 | -0.064    | -0.136 | 0.045  | -0.096    | -0.140 | 0.7000 |        |
| 0.8000                   | -0.015                   | -0.082 | -0.067 | 0.061     | -0.060 | -0.121 | 0.041     | -0.040 | -0.081 | 0.035     | -0.055 | -0.089 | -0.035    | -0.055 | -0.089 | 0.8000 |
| 1.0000                   | 0.762                    | 0.477  | -0.285 | 0.939     | 0.175  | -0.764 | 0.310     | -0.326 | -0.636 | -0.585    | -0.285 | 0.300  | -0.641    | -0.302 | 0.339  | 1.0000 |
| M = 1.298      α=-04.13  |                          |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                   | -0.010                   | 0.167  | 0.177  | -0.065    | 0.040  | 0.105  | -0.052    | 0.122  | 0.174  | -0.052    | 0.023  | 0.075  | -0.074    | -0.134 | -0.060 | 0.0000 |
| 0.0250                   | -0.008                   | 0.100  | 0.107  | -0.079    | 0.015  | 0.094  | -0.087    | 0.046  | 0.133  | -0.102    | -0.007 | 0.095  | -0.141    | -0.069 | 0.072  | 0.0250 |
| 0.0500                   | -0.012                   | 0.052  | 0.064  | -0.084    | -0.005 | 0.079  | -0.107    | -0.004 | 0.103  | -0.132    | -0.027 | 0.105  | -0.168    | -0.041 | 0.127  | 0.0500 |
| 0.1000                   | -0.039                   | 0.017  | 0.056  | -0.068    | -0.023 | 0.044  | -0.097    | -0.025 | 0.073  | -0.128    | -0.036 | 0.093  | -0.168    | -0.041 | 0.072  | 0.1000 |
| 0.1500                   | -0.033                   | 0.017  | 0.050  | -0.071    | -0.004 | 0.067  | -0.088    | -0.038 | 0.051  | -0.130    | -0.036 | 0.093  | -0.154    | -0.051 | 0.103  | 0.1500 |
| 0.2000                   | -0.036                   | 0.017  | 0.053  | -0.070    | -0.019 | 0.051  | -0.091    | -0.045 | 0.045  | -0.130    | -0.043 | 0.088  | -0.142    | -0.067 | 0.074  | 0.2000 |
| 0.3000                   | -0.047                   | -0.018 | 0.029  | -0.069    | -0.041 | 0.028  | -0.095    | -0.062 | 0.034  | -0.117    | -0.082 | 0.035  | -0.124    | -0.096 | 0.028  | 0.3000 |
| 0.4000                   | -0.052                   | -0.040 | 0.012  | -0.078    | -0.068 | 0.010  | -0.101    | -0.064 | 0.037  | -0.109    | -0.095 | 0.013  | -0.124    | -0.114 | 0.010  | 0.4000 |
| 0.5000                   | -0.097                   | -0.082 | 0.015  | -0.092    | -0.085 | 0.007  | -0.113    | -0.098 | 0.015  | -0.119    | -0.116 | 0.003  | -0.138    | -0.100 | 0.039  | 0.5000 |
| 0.6000                   | -0.072                   | -0.072 | -0.001 | -0.088    | -0.081 | 0.007  | -0.112    | -0.085 | 0.023  | -0.115    | -0.113 | 0.003  | -0.132    | -0.088 | 0.045  | 0.6000 |
| 0.7000                   | -0.075                   | -0.074 | 0.001  | -0.088    | -0.093 | -0.005 | -0.101    | -0.101 | -0.119 | -0.101    | -0.119 | -0.017 | -0.121    | -0.084 | 0.037  | 0.7000 |
| 0.8000                   | -0.069                   | -0.075 | -0.006 | -0.071    | -0.092 | -0.020 | -0.075    | -0.119 | -0.044 | -0.086    | -0.136 | -0.050 | -0.057    | -0.126 | -0.069 | 0.8000 |
| 1.0000                   | -0.026                   | -0.076 | -0.050 | 0.009     | -0.049 | -0.058 | 0.010     | -0.174 | -0.183 | -0.053    | -0.205 | -0.152 | -0.057    | -0.126 | -0.069 | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| x/c                        | y/b=0.150       |                 |              | y/b=0.300       |                 |              | y/b=0.450       |                 |              | y/b=0.600       |                 |              | y/b=0.750       |                 |              | x/c    |
|----------------------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|--------|
|                            | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_D$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_D$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_D$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_D$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_D$ |        |
| M = 1.299 $\alpha = -0.20$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                     | 0.043           | -0.086          | -0.129       | 0.063           | -0.187          | -0.250       | 0.091           | -0.188          | -0.252       | 0.057           | -0.224          | -0.281       | 0.017           | -0.335          | -0.352       | 0.0000 |
| 0.0250                     | 0.025           | -0.100          | -0.125       | -0.010          | -0.182          | -0.172       | -0.011          | -0.177          | -0.025       | -0.213          | -0.187          |              |                 |                 |              | 0.0250 |
| 0.0500                     | 0.003           | -0.109          | -0.112       | -0.056          | -0.171          | -0.115       | -0.073          | -0.196          | -0.123       | -0.079          | -0.202          | -0.123       | -0.095          | -0.256          | -0.161       | 0.0500 |
| 0.1000                     | -0.052          | -0.111          | -0.059       | -0.066          | -0.128          | -0.062       | -0.077          | -0.157          | -0.080       | -0.099          | -0.166          | -0.080       | -0.143          | -0.209          | -0.061       | 0.1000 |
| 0.1500                     | -0.058          | -0.116          | -0.058       | -0.084          | -0.136          | -0.052       | -0.089          | -0.146          | -0.058       | -0.116          | -0.166          | -0.050       | -0.139          | -0.195          | -0.052       | 0.1500 |
| 0.2000                     | -0.072          | -0.106          | -0.033       | -0.094          | -0.157          | -0.063       | -0.100          | -0.150          | -0.049       | -0.122          | -0.172          | -0.050       | -0.139          | -0.187          | -0.048       | 0.2000 |
| 0.3000                     | -0.085          | -0.113          | -0.028       | -0.104          | -0.171          | -0.037       | -0.117          | -0.167          | -0.056       | -0.122          | -0.178          | -0.056       | -0.134          | -0.196          | -0.062       | 0.3000 |
| 0.4000                     | -0.092          | -0.128          | -0.036       | -0.113          | -0.158          | -0.045       | -0.122          | -0.178          | -0.056       | -0.133          | -0.180          | -0.047       | -0.154          | -0.199          | -0.065       | 0.4000 |
| 0.5000                     | -0.130          | -0.161          | -0.031       | -0.134          | -0.176          | -0.058       | -0.141          | -0.182          | -0.041       | -0.141          | -0.198          | -0.057       | -0.164          | -0.170          | -0.006       | 0.5000 |
| 0.6000                     | -0.117          | -0.167          | -0.050       | -0.118          | -0.176          | -0.058       | -0.141          | -0.171          | -0.041       | -0.129          | -0.189          | -0.059       | -0.162          | -0.163          | -0.002       | 0.6000 |
| 0.7000                     | -0.128          | -0.163          | -0.035       | -0.128          | -0.167          | -0.038       | -0.153          | -0.153          | -0.053       | -0.109          | -0.165          | -0.055       | -0.151          | -0.016          | 0.7000       | 0.7000 |
| 0.8000                     | -0.089          | -0.145          | -0.056       | -0.091          | -0.142          | -0.051       | -0.100          | -0.100          | -0.071       | -0.043          | -0.072          | -0.028       | -0.151          | -0.016          | 0.8000       | 0.8000 |
| 1.0000                     | 0.140           | -0.070          | -0.209       | 0.123           | -0.048          | -0.172       | -0.028          | -0.099          | -0.071       | -0.043          | -0.072          | -0.028       | -0.151          | -0.016          | 0.135        | 1.0000 |
| M = 1.301 $\alpha = 03.69$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                     | 0.012           | -0.202          | -0.214       | 0.058           | -0.339          | -0.397       | 0.119           | -0.322          | -0.441       | 0.088           | -0.464          | -0.553       | 0.041           | -0.495          | -0.536       | 0.0000 |
| 0.0250                     | -0.014          | -0.207          | -0.193       | -0.022          | -0.312          | -0.290       | 0.119           | -0.340          | -0.345       | -0.006          | -0.404          | -0.397       |                 |                 |              | 0.0250 |
| 0.0500                     | -0.041          | -0.208          | -0.167       | -0.075          | -0.288          | -0.214       | -0.068          | -0.341          | -0.273       | -0.006          | -0.404          | -0.397       | -0.079          | -0.413          | -0.334       | 0.0500 |
| 0.1000                     | -0.102          | -0.202          | -0.099       | -0.093          | -0.246          | -0.154       | -0.091          | -0.290          | -0.199       | -0.070          | -0.360          | -0.290       | -0.142          | -0.361          | -0.218       | 0.1000 |
| 0.1500                     | -0.109          | -0.191          | -0.082       | -0.116          | -0.214          | -0.098       | -0.109          | -0.264          | -0.155       | -0.128          | -0.297          | -0.217       | -0.155          | -0.317          | -0.162       | 0.1500 |
| 0.2000                     | -0.120          | -0.187          | -0.066       | -0.128          | -0.225          | -0.096       | -0.125          | -0.252          | -0.127       | -0.140          | -0.283          | -0.143       | -0.155          | -0.293          | -0.133       | 0.2000 |
| 0.3000                     | -0.136          | -0.187          | -0.051       | -0.149          | -0.220          | -0.071       | -0.147          | -0.242          | -0.095       | -0.148          | -0.270          | -0.122       | -0.160          | -0.267          | -0.101       | 0.3000 |
| 0.4000                     | -0.149          | -0.227          | -0.078       | -0.163          | -0.241          | -0.078       | -0.168          | -0.251          | -0.083       | -0.158          | -0.262          | -0.105       | -0.180          | -0.281          | -0.024       | 0.4000 |
| 0.5000                     | -0.186          | -0.247          | -0.061       | -0.181          | -0.251          | -0.071       | -0.192          | -0.248          | -0.056       | -0.183          | -0.259          | -0.076       | -0.194          | -0.218          | -0.022       | 0.5000 |
| 0.6000                     | -0.169          | -0.229          | -0.059       | -0.163          | -0.250          | -0.087       | -0.180          | -0.259          | -0.078       | -0.181          | -0.253          | -0.072       | -0.189          | -0.211          | -0.022       | 0.6000 |
| 0.7000                     | -0.179          | -0.222          | -0.044       | -0.165          | -0.233          | -0.068       | -0.161          | -0.259          | -0.078       | -0.161          | -0.281          | -0.120       | -0.174          | -0.244          | -0.070       | 0.7000 |
| 0.8000                     | -0.091          | -0.135          | -0.044       | -0.135          | -0.170          | -0.035       | -0.137          | -0.209          | -0.072       | -0.135          | -0.254          | -0.119       | -0.174          | -0.244          | -0.070       | 0.8000 |
| 1.0000                     | 0.373           | 0.282           | -0.091       | 0.021           | 0.096           | 0.075        | -0.068          | -0.075          | -0.007       | -0.070          | -0.038          | 0.032        | -0.077          | -0.587          | -0.510       | 1.0000 |
| M = 1.299 $\alpha = 07.76$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                     | -0.160          | -0.108          | 0.052        | -0.015          | -0.322          | -0.306       | 0.049           | -0.348          | -0.397       | 0.048           | -0.552          | -0.601       | 0.048           | -0.498          | -0.546       | 0.0000 |
| 0.0250                     | -0.184          | -0.138          | 0.046        | -0.113          | -0.305          | -0.191       | -0.060          | -0.369          | -0.309       | -0.037          | -0.468          | -0.431       |                 |                 |              | 0.0250 |
| 0.0500                     | -0.203          | -0.165          | 0.038        | -0.177          | -0.290          | -0.113       | -0.131          | -0.374          | -0.243       | -0.097          | -0.416          | -0.319       | -0.085          | -0.468          | -0.383       | 0.0500 |
| 0.1000                     | -0.220          | -0.205          | 0.016        | -0.200          | -0.268          | -0.067       | -0.156          | -0.335          | -0.178       | -0.140          | -0.406          | -0.265       | -0.156          | -0.450          | -0.295       | 0.1000 |
| 0.1500                     | -0.230          | -0.208          | 0.021        | -0.211          | -0.236          | -0.024       | -0.178          | -0.296          | -0.119       | -0.162          | -0.384          | -0.222       | -0.165          | -0.446          | -0.281       | 0.1500 |
| 0.2000                     | -0.231          | -0.219          | 0.012        | -0.216          | -0.247          | -0.030       | -0.200          | -0.289          | -0.089       | -0.175          | -0.346          | -0.171       | -0.173          | -0.440          | -0.267       | 0.2000 |
| 0.3000                     | -0.231          | -0.234          | -0.004       | -0.235          | -0.262          | -0.027       | -0.215          | -0.291          | -0.076       | -0.185          | -0.309          | -0.124       | -0.188          | -0.414          | -0.226       | 0.3000 |
| 0.4000                     | -0.233          | -0.260          | -0.027       | -0.242          | -0.292          | -0.062       | -0.240          | -0.298          | -0.057       | -0.225          | -0.303          | -0.078       | -0.225          | -0.270          | -0.045       | 0.4000 |
| 0.5000                     | -0.243          | -0.270          | -0.027       | -0.238          | -0.278          | -0.040       | -0.225          | -0.300          | -0.075       | -0.206          | -0.310          | -0.103       | -0.208          | -0.323          | -0.115       | 0.5000 |
| 0.6000                     | -0.234          | -0.274          | -0.040       | -0.228          | -0.290          | -0.050       | -0.234          | -0.295          | -0.062       | -0.224          | -0.303          | -0.078       | -0.225          | -0.270          | -0.045       | 0.6000 |
| 0.7000                     | -0.232          | -0.270          | -0.038       | -0.223          | -0.261          | -0.038       | -0.213          | -0.281          | -0.057       | -0.235          | -0.313          | -0.077       | -0.231          | -0.265          | -0.034       | 0.7000 |
| 0.8000                     | -0.141          | -0.159          | -0.018       | -0.194          | -0.241          | -0.046       | -0.213          | -0.226          | -0.013       | -0.187          | -0.249          | -0.062       | -0.194          | -0.297          | -0.103       | 0.8000 |
| 1.0000                     | 0.305           | 0.380           | 0.075        | -0.064          | -0.225          | -0.161       | -0.131          | -0.226          | 0.130        | -0.064          | 0.114           | 0.177        | 0.044           | -0.658          | -0.702       | 1.0000 |
| M = 1.296 $\alpha = 11.79$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                     | -0.658          | 0.202           | 0.860        | 0.024           | -0.361          | -0.385       | 0.050           | -0.438          | -0.489       | 0.002           | -0.509          | -0.511       | -0.003          | -0.516          | -0.513       | 0.0000 |
| 0.0250                     | -0.647          | 0.107           | 0.754        | -0.120          | -0.319          | -0.199       | -0.081          | -0.415          | -0.333       | -0.091          | -0.471          | -0.380       |                 |                 |              | 0.0250 |
| 0.0500                     | -0.638          | 0.025           | 0.663        | -0.218          | -0.288          | -0.070       | -0.169          | -0.394          | -0.225       | -0.156          | -0.448          | -0.292       | -0.141          | -0.506          | -0.364       | 0.0500 |
| 0.1000                     | -0.628          | -0.099          | 0.529        | -0.281          | -0.262          | 0.018        | -0.213          | -0.359          | -0.146       | -0.205          | -0.446          | -0.241       | -0.218          | -0.501          | -0.283       | 0.1000 |
| 0.1500                     | -0.613          | -0.148          | 0.465        | -0.319          | -0.243          | 0.076        | -0.257          | -0.332          | -0.075       | -0.237          | -0.446          | -0.207       | -0.233          | -0.501          | -0.268       | 0.1500 |
| 0.2000                     | -0.599          | -0.179          | 0.420        | -0.352          | -0.248          | 0.104        | -0.284          | -0.317          | -0.033       | -0.257          | -0.405          | -0.248       | -0.502          | -0.254          | -0.200       | 0.2000 |
| 0.3000                     | -0.531          | -0.235          | 0.297        | -0.392          | -0.278          | 0.113        | -0.316          | -0.317          | -0.001       | -0.278          | -0.344          | -0.066       | -0.270          | -0.437          | -0.167       | 0.3000 |
| 0.4000                     | -0.460          | -0.276          | 0.184        | -0.411          | -0.297          | 0.114        | -0.343          | -0.329          | 0.014        | -0.305          | -0.343          | -0.038       | -0.260          | -0.358          | -0.098       | 0.4000 |
| 0.5000                     | -0.406          | -0.294          | 0.111        | -0.403          | -0.323          | 0.080        | -0.365          | -0.331          | 0.034        | -0.321          | -0.345          | -0.024       | -0.214          | -0.298          | -0.084       | 0.5000 |
| 0.6000                     | -0.355          | -0.300          | 0.055        | -0.357          | -0.337          | 0.020        | -0.366          | -0.336          | 0.031        | -0.276          | -0.338          | -0.062       | -0.194          | -0.297          | -0.103       | 0.6000 |
| 0.7000                     | -0.302          | -0.313          | -0.011       | -0.356          | -0.329          | 0.028        | -0.336          | -0.336          | -0.030       | -0.214          | -0.349          | -0.135       | -0.118          | -0.268          | -0.150       | 0.7000 |
| 0.8000                     | -0.192          | -0.162          | 0.030        | -0.176          | -0.151          | 0.026        | -0.129          | -0.159          | -0.030       | -0.026          | -0.155          | -0.129       |                 |                 |              | 0.8000 |
| 1.0000                     | 0.201           | 0.634           | 0.432        | 0.722           | 0.714           | -0.008       | 0.426           | 0.729           | 0.303        | 0.728           | 0.845           | 0.117        | 0.453           | -0.012          | -0.466       | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

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| x/c                      | y/b=0.150                |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub>          | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
|                          | M = 1.299      α = 15.82 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.574                   | -0.453          | 0.120           | -0.543          | -0.478          | 0.065           | -0.057          | -0.356          | -0.299          | -0.008          | -0.525          | -0.517          | -0.026          | -0.571          | -0.545          | 0.0000 |
| 0.0250                   | -0.579                   | -0.420          | 0.159           | -0.578          | -0.447          | 0.130           | -0.192          | -0.348          | -0.157          | -0.100          | -0.528          | -0.428          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.581                   | -0.388          | 0.192           | -0.597          | -0.434          | 0.164           | -0.279          | -0.342          | -0.062          | -0.166          | -0.531          | -0.365          | -0.150          | -0.561          | -0.411          | 0.0500 |
| 0.1000                   | -0.577                   | -0.334          | 0.243           | -0.591          | -0.459          | 0.132           | -0.317          | -0.331          | -0.014          | -0.222          | -0.534          | -0.313          | -0.218          | -0.556          | -0.339          | 0.1000 |
| 0.1500                   | -0.585                   | -0.275          | 0.310           | -0.587          | -0.467          | 0.120           | -0.346          | -0.359          | -0.013          | -0.257          | -0.511          | -0.254          | -0.230          | -0.556          | -0.326          | 0.1500 |
| 0.2000                   | -0.586                   | -0.228          | 0.358           | -0.586          | -0.484          | 0.102           | -0.376          | -0.379          | -0.003          | -0.277          | -0.429          | -0.152          | -0.242          | -0.557          | -0.316          | 0.2000 |
| 0.3000                   | -0.587                   | -0.182          | 0.405           | -0.584          | -0.502          | 0.083           | -0.398          | -0.385          | 0.012           | -0.290          | -0.372          | -0.082          | -0.247          | -0.500          | -0.253          | 0.3000 |
| 0.4000                   | -0.589                   | -0.164          | 0.426           | -0.583          | -0.516          | 0.068           | -0.413          | -0.396          | 0.017           | -0.302          | -0.342          | -0.040          | -0.199          | -0.386          | -0.187          | 0.4000 |
| 0.5000                   | -0.590                   | -0.197          | 0.393           | -0.586          | -0.495          | 0.090           | -0.428          | -0.400          | 0.028           | -0.309          | -0.271          | 0.038           | -0.146          | -0.259          | -0.114          | 0.5000 |
| 0.6000                   | -0.585                   | -0.185          | 0.400           | -0.538          | -0.470          | 0.069           | -0.425          | -0.338          | 0.087           | -0.275          | -0.227          | 0.048           | -0.008          | -0.197          | -0.189          | 0.6000 |
| 0.7000                   | -0.567                   | -0.224          | 0.343           | -0.542          | -0.395          | 0.147           |                 | -0.358          |                 | -0.088          | -0.193          | -0.105          | 0.107           | -0.141          | -0.248          | 0.7000 |
| 0.8000                   | -0.494                   | -0.059          | 0.436           | -0.360          | -0.209          | 0.151           | -0.090          | -0.390          | -0.300          | 0.127           | -0.165          | -0.292          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.185                   | 0.888           | 1.074           | 0.558           | 0.494           | -0.064          | 0.684           | -0.490          | -1.174          | 0.641           | -0.129          | -0.770          | 0.312           | -0.017          | -0.329          | 1.0000 |
| M = 1.498      α = 03.68 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.010                    | -0.179          | -0.189          | 0.109           | -0.224          | -0.333          | 0.148           | -0.137          | -0.285          | 0.080           | -0.227          | -0.307          | 0.071           | -0.316          | -0.387          | 0.0000 |
| 0.0250                   | -0.002                   | -0.169          | -0.167          | 0.017           | -0.229          | -0.246          | 0.040           | -0.216          | -0.256          | 0.020           | -0.260          | -0.280          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.020                   | -0.164          | -0.143          | -0.043          | -0.225          | -0.183          | -0.029          | -0.260          | -0.231          | -0.025          | -0.275          | -0.250          | -0.037          | -0.294          | -0.257          | 0.0500 |
| 0.1000                   | -0.074                   | -0.163          | -0.089          | -0.066          | -0.195          | -0.129          | -0.053          | -0.244          | -0.191          | -0.070          | -0.251          | -0.181          | -0.094          | -0.278          | -0.185          | 0.1000 |
| 0.1500                   | -0.094                   | -0.166          | -0.072          | -0.079          | -0.186          | -0.107          | -0.078          | -0.220          | -0.142          | -0.092          | -0.230          | -0.138          | -0.100          | -0.270          | -0.169          | 0.1500 |
| 0.2000                   | -0.096                   | -0.157          | -0.061          | -0.088          | -0.188          | -0.100          | -0.099          | -0.200          | -0.101          | -0.105          | -0.227          | -0.122          | -0.103          | -0.257          | -0.154          | 0.2000 |
| 0.3000                   | -0.110                   | -0.156          | -0.046          | -0.103          | -0.168          | -0.065          | -0.115          | -0.193          | -0.077          | -0.107          | -0.231          | -0.123          | -0.113          | -0.234          | -0.121          | 0.3000 |
| 0.4000                   | -0.114                   | -0.160          | -0.046          | -0.117          | -0.186          | -0.069          | -0.128          | -0.206          | -0.078          | -0.123          | -0.219          | -0.096          | -0.125          | -0.216          | -0.091          | 0.4000 |
| 0.5000                   | -0.117                   | -0.176          | -0.059          | -0.132          | -0.190          | -0.058          | -0.141          | -0.205          | -0.066          | -0.137          | -0.209          | -0.072          | -0.141          | -0.207          | -0.066          | 0.5000 |
| 0.6000                   | -0.133                   | -0.181          | -0.049          | -0.135          | -0.197          | -0.062          | -0.146          | -0.201          | -0.055          | -0.145          | -0.200          | -0.056          | -0.149          | -0.209          | -0.060          | 0.6000 |
| 0.7000                   | -0.141                   | -0.174          | -0.034          | -0.156          | -0.200          | -0.043          |                 | -0.206          |                 | -0.146          | -0.208          | -0.062          | -0.157          | -0.218          | -0.061          | 0.7000 |
| 0.8000                   | -0.128                   | -0.137          | -0.008          | -0.135          | -0.183          | -0.048          | -0.142          | -0.216          | -0.075          | -0.145          | -0.220          | -0.075          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.044                   | 0.029           | 0.072           | 0.033           | -0.093          | -0.126          | -0.117          | -0.257          | -0.140          | -0.137          | -0.258          | -0.121          | -0.179          | -0.296          | -0.117          | 1.0000 |
| M = 1.698      α = 03.83 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.044                    | -0.108          | -0.152          | 0.106           | -0.130          | -0.237          | 0.138           | -0.065          | -0.203          | 0.103           | -0.114          | -0.216          | 0.090           | -0.204          | -0.294          | 0.0000 |
| 0.0250                   | 0.005                    | -0.131          | -0.136          | 0.020           | -0.160          | -0.180          | 0.040           | -0.134          | -0.174          | 0.029           | -0.153          | -0.181          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.026                   | -0.145          | -0.119          | -0.036          | -0.176          | -0.141          | -0.024          | -0.178          | -0.155          | -0.022          | -0.178          | -0.156          | -0.015          | -0.201          | -0.186          | 0.0500 |
| 0.1000                   | -0.063                   | -0.144          | -0.081          | -0.058          | -0.172          | -0.114          | -0.045          | -0.193          | -0.149          | -0.050          | -0.185          | -0.135          | -0.070          | -0.196          | -0.126          | 0.1000 |
| 0.1500                   | -0.081                   | -0.140          | -0.060          | -0.073          | -0.165          | -0.092          | -0.067          | -0.187          | -0.119          | -0.071          | -0.188          | -0.117          | -0.076          | -0.190          | -0.114          | 0.1500 |
| 0.2000                   | -0.090                   | -0.136          | -0.046          | -0.087          | -0.160          | -0.073          | -0.085          | -0.181          | -0.096          | -0.084          | -0.194          | -0.110          | -0.082          | -0.188          | -0.106          | 0.2000 |
| 0.3000                   | -0.100                   | -0.139          | -0.040          | -0.098          | -0.152          | -0.054          | -0.099          | -0.177          | -0.078          | -0.089          | -0.194          | -0.106          | -0.089          | -0.188          | -0.099          | 0.3000 |
| 0.4000                   | -0.111                   | -0.142          | -0.031          | -0.109          | -0.163          | -0.054          | -0.110          | -0.176          | -0.066          | -0.100          | -0.178          | -0.078          | -0.096          | -0.184          | -0.088          | 0.4000 |
| 0.5000                   | -0.115                   | -0.161          | -0.045          | -0.116          | -0.157          | -0.041          | -0.119          | -0.169          | -0.049          | -0.111          | -0.169          | -0.059          | -0.106          | -0.141          | -0.035          | 0.5000 |
| 0.6000                   | -0.130                   | -0.152          | -0.022          | -0.105          | -0.169          | -0.065          | -0.123          | -0.167          | -0.044          | -0.115          | -0.179          | -0.064          | -0.113          | -0.145          | -0.033          | 0.6000 |
| 0.7000                   | -0.128                   | -0.161          | -0.032          | -0.138          | -0.171          | -0.033          |                 | -0.177          |                 | -0.121          | -0.188          | -0.067          | -0.117          | -0.152          | -0.035          | 0.7000 |
| 0.8000                   | -0.127                   | -0.146          | -0.019          | -0.131          | -0.165          | -0.034          | -0.128          | -0.173          | -0.045          | -0.121          | -0.180          | -0.058          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.122                   | -0.045          | 0.077           | 0.004           | -0.126          | -0.130          | -0.129          | -0.122          | 0.006           | -0.103          | -0.111          | -0.007          | -0.111          | -0.180          | -0.070          | 1.0000 |
| M = 1.893      α = 04.03 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.050                    | -0.037          | -0.087          | 0.133           | -0.065          | -0.197          | 0.156           | -0.010          | -0.166          | 0.134           | -0.068          | -0.202          | 0.116           | -0.111          | -0.228          | 0.0000 |
| 0.0250                   | 0.017                    | -0.081          | -0.098          | 0.042           | -0.101          | -0.143          | 0.057           | -0.074          | -0.131          | 0.057           | -0.094          | -0.151          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.012                   | -0.110          | -0.098          | -0.018          | -0.126          | -0.108          | -0.006          | -0.116          | -0.110          | 0.005           | -0.113          | -0.117          | 0.020           | -0.118          | -0.138          | 0.0500 |
| 0.1000                   | -0.061                   | -0.126          | -0.065          | -0.044          | -0.140          | -0.095          | -0.027          | -0.139          | -0.112          | -0.024          | -0.125          | -0.101          | -0.032          | -0.121          | -0.089          | 0.1000 |
| 0.1500                   | -0.072                   | -0.119          | -0.047          | -0.059          | -0.136          | -0.077          | -0.045          | -0.139          | -0.094          | -0.041          | -0.130          | -0.089          | -0.040          | -0.121          | -0.081          | 0.1500 |
| 0.2000                   | -0.080                   | -0.117          | -0.037          | -0.072          | -0.135          | -0.063          | -0.062          | -0.144          | -0.081          | -0.057          | -0.137          | -0.081          | -0.050          | -0.122          | -0.072          | 0.2000 |
| 0.3000                   | -0.085                   | -0.120          | -0.035          | -0.088          | -0.135          | -0.046          | -0.079          | -0.146          | -0.067          | -0.068          | -0.146          | -0.079          | -0.063          | -0.132          | -0.070          | 0.3000 |
| 0.4000                   | -0.097                   | -0.120          | -0.023          | -0.096          | -0.134          | -0.038          | -0.091          | -0.145          | -0.054          | -0.077          | -0.148          | -0.071          | -0.074          | -0.140          | -0.066          | 0.4000 |
| 0.5000                   | -0.102                   | -0.126          | -0.024          | -0.103          | -0.135          | -0.032          | -0.099          | -0.143          | -0.044          | -0.092          | -0.149          | -0.057          | -0.087          | -0.115          | -0.028          | 0.5000 |
| 0.6000                   | -0.114                   | -0.128          | -0.015          | -0.083          | -0.140          | -0.057          | -0.109          | -0.139          | -0.030          | -0.101          | -0.149          | -0.049          | -0.095          | -0.124          | -0.029          | 0.6000 |
| 0.7000                   | -0.112                   | -0.137          | -0.024          | -0.116          | -0.133          | -0.018          |                 | -0.140          |                 | -0.103          | -0.148          | -0.045          | -0.099          | -0.126          | -0.027          | 0.7000 |
| 0.8000                   | -0.115                   | -0.120          | -0.005          | -0.113          | -0.146          | -0.033          | -0.106          | -0.148          | -0.042          | -0.103          | -0.146          | -0.043          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.130                   | -0.013          | 0.117           | 0.000           | -0.227          | -0.227          | -0.075          | -0.186          | -0.111          | -0.096          | -0.143          | -0.047          | -0.094          | -0.094          |                 | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Continued

| x/c                                | y/b=0.150       |                 |              | y/b=0.300       |                 |              | y/b=0.450       |                 |              | y/b=0.600       |                 |              | y/b=0.750       |                 |              | x/c    |
|------------------------------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|--------|
|                                    | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ |        |
| M = 2.234 $\alpha = -0.3^\circ 83$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                             | 0.117           | 0.155           | 0.038        | 0.214           | 0.110           | -0.085       | 0.249           | 0.229           | -0.020       | 0.203           | 0.186           | -0.017       | 0.220           | 0.062           | -0.158       | 0.0000 |
| 0.0250                             | 0.082           | 0.100           | 0.018        | 0.110           | 0.085           | -0.025       | 0.133           | 0.137           | 0.005        | 0.124           | 0.118           | -0.006       |                 |                 |              | 0.0250 |
| 0.0500                             | 0.052           | 0.057           | 0.005        | 0.043           | 0.046           | 0.004        | 0.058           | 0.075           | 0.017        | 0.069           | 0.072           | 0.002        | 0.095           | 0.055           | -0.040       | 0.0500 |
| 0.1000                             | 0.006           | 0.009           | 0.003        | 0.015           | 0.015           | 0.000        | 0.030           | 0.037           | 0.007        | 0.035           | 0.047           | 0.012        | 0.028           | 0.048           | 0.020        | 0.1000 |
| 0.1500                             | -0.002          | -0.004          | -0.002       | 0.001           | 0.005           | 0.004        | 0.013           | 0.022           | 0.009        | 0.018           | 0.034           | 0.016        | 0.019           | 0.041           | 0.022        | 0.1500 |
| 0.2000                             | -0.007          | -0.010          | -0.003       | -0.013          | -0.008          | 0.005        | -0.006          | 0.008           | 0.013        | 0.005           | 0.022           | 0.017        | 0.009           | 0.030           | 0.021        | 0.2000 |
| 0.3000                             | -0.015          | -0.013          | 0.002        | -0.026          | -0.017          | 0.009        | -0.020          | -0.010          | 0.010        | -0.006          | -0.001          | 0.005        | -0.001          | 0.010           | 0.011        | 0.3000 |
| 0.4000                             | -0.024          | -0.017          | 0.007        | -0.029          | -0.026          | 0.003        | -0.032          | -0.022          | 0.010        | -0.020          | -0.017          | 0.003        | -0.011          | -0.005          | 0.004        | 0.4000 |
| 0.5000                             | -0.028          | -0.020          | 0.008        | -0.034          | -0.028          | 0.006        | -0.037          | -0.027          | 0.010        | -0.032          | -0.027          | 0.005        | -0.021          | -0.040          | -0.019       | 0.5000 |
| 0.6000                             | -0.033          | -0.025          | 0.008        | -0.003          | -0.029          | -0.032       | -0.041          | -0.030          | 0.011        | -0.039          | -0.031          | 0.008        | -0.030          | -0.049          | -0.019       | 0.6000 |
| 0.7000                             | -0.038          | -0.034          | 0.004        | -0.042          | -0.032          | 0.010        | -0.036          | -0.036          | -0.010       | -0.041          | -0.041          | 0.000        | -0.035          | -0.057          | -0.022       | 0.7000 |
| 0.8000                             | -0.035          | -0.037          | -0.003       | -0.036          | -0.040          | -0.004       | -0.036          | -0.046          | -0.010       | -0.038          | -0.053          | -0.015       |                 |                 |              | 0.8000 |
| 1.0000                             | -0.003          | -0.032          | -0.029       | 0.127           | -0.075          | -0.202       | -0.014          | -0.077          | -0.063       | -0.014          | -0.085          | -0.071       | -0.028          | -0.078          | -0.050       | 1.0000 |
| M = 2.233 $\alpha = 00.15$         |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                             | 0.111           | 0.060           | -0.052       | 0.197           | 0.051           | -0.146       | 0.243           | 0.119           | -0.124       | 0.177           | 0.099           | -0.076       | 0.178           | -0.005          | -0.182       | 0.0000 |
| 0.0250                             | 0.074           | 0.022           | -0.052       | 0.099           | 0.009           | -0.090       | 0.121           | 0.049           | -0.072       | 0.103           | 0.042           | -0.062       |                 |                 |              | 0.0250 |
| 0.0500                             | 0.041           | -0.012          | -0.053       | 0.034           | -0.021          | -0.055       | 0.043           | 0.002           | -0.041       | 0.053           | 0.003           | -0.049       | 0.068           | -0.007          | -0.075       | 0.0500 |
| 0.1000                             | -0.008          | -0.070          | -0.062       | 0.004           | -0.046          | -0.050       | 0.018           | -0.027          | -0.046       | 0.020           | -0.018          | -0.038       | 0.009           | -0.011          | -0.020       | 0.1000 |
| 0.1500                             | -0.022          | -0.072          | -0.051       | -0.012          | -0.060          | -0.048       | 0.001           | -0.040          | -0.040       | -0.010          | -0.038          | -0.028       | -0.001          | -0.018          | -0.017       | 0.1500 |
| 0.2000                             | -0.030          | -0.068          | -0.038       | -0.026          | -0.072          | -0.045       | -0.017          | -0.052          | -0.034       | -0.010          | -0.026          | -0.031       | -0.008          | -0.027          | -0.019       | 0.2000 |
| 0.3000                             | -0.039          | -0.070          | -0.030       | -0.041          | -0.075          | -0.034       | -0.034          | -0.065          | -0.031       | -0.021          | -0.054          | -0.034       | -0.019          | -0.041          | -0.022       | 0.3000 |
| 0.4000                             | -0.049          | -0.069          | -0.020       | -0.047          | -0.081          | -0.033       | -0.046          | -0.077          | -0.031       | -0.036          | -0.068          | -0.032       | -0.030          | -0.053          | -0.023       | 0.4000 |
| 0.5000                             | -0.052          | -0.069          | -0.016       | -0.054          | -0.080          | -0.026       | -0.054          | -0.080          | -0.025       | -0.047          | -0.075          | -0.028       | -0.039          | -0.079          | -0.040       | 0.5000 |
| 0.6000                             | -0.058          | -0.073          | -0.015       | -0.017          | -0.078          | -0.061       | -0.059          | -0.080          | -0.022       | -0.054          | -0.073          | -0.019       | -0.047          | -0.083          | -0.036       | 0.6000 |
| 0.7000                             | -0.064          | -0.077          | -0.013       | -0.065          | -0.077          | -0.012       | -0.082          | -0.088          | -0.028       | -0.058          | -0.085          | -0.026       | -0.052          | -0.087          | -0.035       | 0.7000 |
| 0.8000                             | -0.060          | -0.075          | -0.015       | -0.060          | -0.081          | -0.021       | -0.060          | -0.088          | -0.028       | -0.057          | -0.093          | -0.036       |                 |                 |              | 0.8000 |
| 1.0000                             | -0.022          | -0.057          | -0.035       | 0.110           | -0.100          | -0.210       | -0.051          | -0.115          | -0.064       | -0.038          | -0.102          | -0.064       | -0.057          | -0.102          | -0.045       | 1.0000 |
| M = 2.231 $\alpha = 04.18$         |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                             | 0.084           | -0.024          | -0.108       | 0.163           | -0.031          | -0.193       | 0.182           | 0.027           | -0.155       | 0.148           | 0.006           | -0.142       | 0.140           | -0.066          | -0.206       | 0.0000 |
| 0.0250                             | 0.041           | -0.051          | -0.092       | 0.068           | -0.064          | -0.131       | 0.086           | -0.030          | -0.116       | 0.082           | -0.037          | -0.118       |                 |                 |              | 0.0250 |
| 0.0500                             | 0.005           | -0.074          | -0.079       | 0.005           | -0.086          | -0.091       | 0.023           | -0.068          | -0.092       | 0.036           | -0.065          | -0.101       | 0.045           | -0.071          | -0.115       | 0.0500 |
| 0.1000                             | -0.044          | -0.111          | -0.067       | -0.023          | -0.099          | -0.075       | -0.005          | -0.091          | -0.086       | 0.004           | -0.080          | -0.084       | -0.007          | -0.074          | -0.067       | 0.1000 |
| 0.1500                             | -0.059          | -0.109          | -0.050       | -0.039          | -0.106          | -0.067       | -0.023          | -0.098          | -0.075       | -0.014          | -0.087          | -0.073       | -0.016          | -0.076          | -0.060       | 0.1500 |
| 0.2000                             | -0.068          | -0.107          | -0.039       | -0.053          | -0.116          | -0.064       | -0.040          | -0.105          | -0.064       | -0.029          | -0.094          | -0.065       | -0.024          | -0.081          | -0.057       | 0.2000 |
| 0.3000                             | -0.076          | -0.108          | -0.031       | -0.069          | -0.120          | -0.050       | -0.059          | -0.115          | -0.056       | -0.042          | -0.104          | -0.061       | -0.036          | -0.091          | -0.055       | 0.3000 |
| 0.4000                             | -0.084          | -0.106          | -0.017       | -0.083          | -0.115          | -0.034       | -0.070          | -0.120          | -0.050       | -0.055          | -0.114          | -0.059       | -0.046          | -0.101          | -0.055       | 0.4000 |
| 0.5000                             | -0.088          | -0.105          | -0.022       | -0.076          | -0.119          | -0.043       | -0.079          | -0.119          | -0.040       | -0.067          | -0.119          | -0.052       | -0.056          | -0.124          | -0.067       | 0.5000 |
| 0.6000                             | -0.089          | -0.107          | -0.017       | -0.040          | -0.115          | -0.075       | -0.084          | -0.118          | -0.035       | -0.075          | -0.116          | -0.042       | -0.066          | -0.126          | -0.060       | 0.6000 |
| 0.7000                             | -0.097          | -0.109          | -0.012       | -0.093          | -0.114          | -0.020       | -0.120          | -0.120          | -0.034       | -0.079          | -0.124          | -0.045       | -0.071          | -0.129          | -0.058       | 0.7000 |
| 0.8000                             | -0.091          | -0.103          | -0.012       | -0.089          | -0.115          | -0.026       | -0.090          | -0.123          | -0.034       | -0.081          | -0.131          | -0.050       |                 |                 |              | 0.8000 |
| 1.0000                             | -0.040          | -0.066          | -0.026       | 0.091           | -0.126          | -0.217       | -0.091          | -0.138          | -0.047       | -0.076          | -0.139          | -0.064       | -0.058          | -0.145          | -0.087       | 1.0000 |
| M = 2.234 $\alpha = 08.16$         |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                             | 0.047           | -0.137          | -0.184       | 0.132           | -0.099          | -0.230       | 0.153           | 0.883           | 0.730        | 0.111           | -0.088          | -0.199       | 0.116           | -0.127          | -0.242       | 0.0000 |
| 0.0250                             | 0.005           | -0.136          | -0.141       | 0.045           | -0.127          | -0.172       | 0.062           | 0.255           | 0.193        | 0.056           | -0.112          | -0.168       |                 |                 |              | 0.0250 |
| 0.0500                             | -0.031          | -0.136          | -0.105       | -0.013          | -0.145          | -0.131       | 0.003           | -0.124          | -0.127       | 0.016           | -0.128          | -0.145       | 0.029           | -0.129          | -0.158       | 0.0500 |
| 0.1000                             | -0.081          | -0.138          | -0.057       | -0.046          | -0.151          | -0.105       | -0.022          | -0.141          | -0.119       | -0.016          | -0.135          | -0.119       | -0.020          | -0.132          | -0.112       | 0.1000 |
| 0.1500                             | -0.099          | -0.135          | -0.036       | -0.063          | -0.144          | -0.080       | -0.043          | -0.146          | -0.103       | -0.034          | -0.137          | -0.104       | -0.030          | -0.133          | -0.103       | 0.1500 |
| 0.2000                             | -0.107          | -0.128          | -0.021       | -0.079          | -0.142          | -0.063       | -0.060          | -0.148          | -0.088       | -0.048          | -0.142          | -0.094       | -0.039          | -0.135          | -0.096       | 0.2000 |
| 0.3000                             | -0.116          | -0.132          | -0.016       | -0.097          | -0.142          | -0.045       | -0.078          | -0.149          | -0.071       | -0.060          | -0.147          | -0.086       | -0.052          | -0.140          | -0.088       | 0.3000 |
| 0.4000                             | -0.124          | -0.135          | -0.011       | -0.103          | -0.142          | -0.039       | -0.092          | -0.150          | -0.058       | -0.074          | -0.152          | -0.078       | -0.063          | -0.145          | -0.082       | 0.4000 |
| 0.5000                             | -0.127          | -0.137          | -0.010       | -0.112          | -0.141          | -0.029       | -0.107          | -0.145          | -0.046       | -0.087          | -0.154          | -0.068       | -0.073          | -0.137          | -0.064       | 0.5000 |
| 0.6000                             | -0.126          | -0.138          | -0.012       | -0.123          | -0.136          | -0.009       | -0.144          | -0.144          | -0.037       | -0.095          | -0.150          | -0.055       | -0.082          | -0.137          | -0.056       | 0.6000 |
| 0.7000                             | -0.130          | -0.140          | -0.010       | -0.127          | -0.136          | -0.012       | -0.146          | -0.146          | -0.102       | -0.154          | -0.154          | -0.052       | -0.088          | -0.137          | -0.049       | 0.7000 |
| 0.8000                             | -0.126          | -0.127          |              | -0.123          | -0.136          | -0.012       | -0.146          | -0.146          | -0.033       | -0.102          | -0.154          | -0.052       |                 |                 |              | 0.8000 |
| 1.0000                             | -0.098          | -0.056          | 0.042        | 0.093           | -0.127          | -0.220       | -0.109          | -0.153          | -0.045       | -0.082          | -0.145          | -0.062       | -0.096          | -0.137          | -0.041       | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $0^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$  - Concluded

| x/c                      | y/b=0.150                |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub>          | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
|                          | M = 2.231      α = 12.24 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.047                   | -0.161          | -0.114          | 0.037           | -0.196          | -0.233          | 0.077           | -0.152          | -0.229          | 0.082           | -0.150          | -0.233          | 0.082           | -0.173          | -0.255          | 0.0000 |
| 0.0250                   | -0.073                   | -0.166          | -0.093          | -0.026          | -0.194          | -0.168          | 0.010           | -0.164          | -0.174          | 0.031           | -0.165          | -0.196          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.096                   | -0.170          | -0.074          | -0.068          | -0.193          | -0.125          | -0.036          | -0.170          | -0.134          | -0.005          | -0.173          | -0.168          | 0.007           | -0.174          | -0.181          | 0.0500 |
| 0.1000                   | -0.129                   | -0.175          | -0.046          | -0.092          | -0.193          | -0.101          | -0.062          | -0.167          | -0.105          | -0.036          | -0.171          | -0.136          | -0.036          | -0.175          | -0.139          | 0.1000 |
| 0.1500                   | -0.142                   | -0.179          | -0.037          | -0.105          | -0.190          | -0.085          | -0.074          | -0.167          | -0.092          | -0.053          | -0.168          | -0.115          | -0.044          | -0.174          | -0.128          | 0.1500 |
| 0.2000                   | -0.149                   | -0.180          | -0.031          | -0.118          | -0.192          | -0.074          | -0.091          | -0.165          | -0.074          | -0.066          | -0.168          | -0.100          | -0.057          | -0.174          | -0.117          | 0.2000 |
| 0.3000                   | -0.158                   | -0.184          | -0.025          | -0.130          | -0.159          | -0.029          | -0.107          | -0.160          | -0.053          | -0.080          | -0.168          | -0.087          | -0.069          | -0.173          | -0.104          | 0.3000 |
| 0.4000                   | -0.158                   | -0.171          | -0.013          | -0.135          | -0.147          | -0.011          | -0.118          | -0.164          | -0.046          | -0.093          | -0.170          | -0.076          | -0.080          | -0.172          | -0.092          | 0.4000 |
| 0.5000                   | -0.158                   | -0.161          | -0.003          | -0.142          | -0.162          | -0.020          | -0.127          | -0.166          | -0.039          | -0.105          | -0.170          | -0.065          | -0.089          | -0.123          | -0.034          | 0.5000 |
| 0.6000                   | -0.159                   | -0.163          | -0.004          | -0.084          | -0.171          | -0.087          | -0.132          | -0.170          | -0.038          | -0.113          | -0.164          | -0.051          | -0.098          | -0.116          | -0.018          | 0.6000 |
| 0.7000                   | -0.162                   | -0.167          | -0.004          | -0.155          | -0.158          | -0.003          |                 | -0.163          |                 | -0.118          | -0.159          | -0.041          | -0.105          | -0.111          | -0.005          | 0.7000 |
| 0.8000                   | -0.155                   | -0.136          | 0.019           | -0.152          | -0.128          | 0.024           | -0.137          | -0.137          | 0.000           | -0.121          | -0.141          | -0.020          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.105                   | 0.032           | 0.137           | 0.079           | -0.016          | -0.095          | -0.134          | -0.029          | 0.105           | -0.118          | -0.063          | 0.055           | -0.120          | -0.102          | 0.018           | 1.0000 |
| M = 2.224      α = 16.22 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.182                   | -0.169          | 0.013           | -0.022          | -0.207          | -0.185          | -0.012          | -0.183          | -0.171          | -0.029          | -0.194          | -0.165          | 0.006           | -0.184          | -0.190          | 0.0000 |
| 0.0250                   | -0.180                   | -0.173          | 0.007           | -0.073          | -0.206          | -0.133          | -0.056          | -0.197          | -0.140          | -0.051          | -0.199          | -0.148          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.177                   | -0.177          | 0.000           | -0.107          | -0.206          | -0.099          | -0.087          | -0.204          | -0.118          | -0.068          | -0.201          | -0.134          | -0.041          | -0.178          | -0.137          | 0.0500 |
| 0.1000                   | -0.169                   | -0.186          | -0.017          | -0.124          | -0.206          | -0.083          | -0.105          | -0.203          | -0.098          | -0.086          | -0.201          | -0.115          | -0.069          | -0.173          | -0.109          | 0.1000 |
| 0.1500                   | -0.188                   | -0.186          | 0.001           | -0.134          | -0.204          | -0.070          | -0.114          | -0.202          | -0.089          | -0.098          | -0.200          | -0.102          | -0.076          | -0.169          | -0.093          | 0.1500 |
| 0.2000                   | -0.188                   | -0.181          | 0.007           | -0.142          | -0.206          | -0.064          | -0.125          | -0.202          | -0.077          | -0.108          | -0.199          | -0.091          | -0.084          | -0.165          | -0.081          | 0.2000 |
| 0.3000                   | -0.189                   | -0.174          | 0.015           | -0.153          | -0.199          | -0.046          | -0.138          | -0.202          | -0.064          | -0.116          | -0.194          | -0.078          | -0.095          | -0.160          | -0.065          | 0.3000 |
| 0.4000                   | -0.189                   | -0.161          | 0.028           | -0.157          | -0.201          | -0.034          | -0.146          | -0.202          | -0.056          | -0.125          | -0.184          | -0.060          | -0.105          | -0.160          | -0.055          | 0.4000 |
| 0.5000                   | -0.185                   | -0.149          | 0.036           | -0.163          | -0.203          | -0.039          | -0.151          | -0.200          | -0.049          | -0.133          | -0.172          | -0.039          | -0.113          | -0.109          | 0.003           | 0.5000 |
| 0.6000                   | -0.180                   | -0.150          | 0.029           | -0.096          | -0.203          | -0.107          | -0.155          | -0.194          | -0.039          | -0.141          | -0.161          | -0.020          | -0.118          | -0.098          | 0.020           | 0.6000 |
| 0.7000                   | -0.182                   | -0.150          | 0.032           | -0.181          | -0.173          | 0.008           |                 | -0.176          |                 | -0.144          | -0.147          | -0.003          | -0.123          | -0.086          | 0.037           | 0.7000 |
| 0.8000                   | -0.148                   | -0.124          | 0.025           | -0.163          | -0.166          | -0.004          | -0.157          | -0.140          | 0.018           | -0.145          | -0.132          | 0.013           |                 |                 |                 | 0.8000 |
| 1.0000                   | 0.028                    | 0.008           | -0.021          | 0.185           | -0.221          | -0.406          | -0.152          | -0.013          | 0.139           | -0.141          | -0.100          | 0.040           | -0.135          | -0.048          | 0.087           | 1.0000 |
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|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
|                          |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$

| x/c                      | y/b=0.150                |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub>          | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
|                          | M = 0.697      α = -0.42 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.181                   | 0.102           | 0.283           | -0.212          | -0.005          | 0.207           | -0.220          | -0.603          | -0.384          | -0.421          | 0.140           | 0.560           | -0.578          | -0.191          | 0.387           | 0.0000 |
| 0.0250                   | -0.161                   | 0.039           | 0.201           | -0.206          | -0.029          | 0.177           | -0.218          | -0.024          | -0.242          | -0.426          | 0.032           | 0.456           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.148                   | -0.008          | 0.140           | -0.195          | -0.047          | 0.148           | -0.208          | 0.392           | 0.600           | -0.409          | -0.035          | 0.374           | -0.427          | -0.089          | 0.338           | 0.0500 |
| 0.1000                   | -0.142                   | -0.059          | 0.083           | -0.156          | -0.064          | 0.092           | -0.163          | 0.352           | 0.515           | -0.327          | -0.050          | 0.277           | -0.322          | -0.048          | 0.274           | 0.1000 |
| 0.1500                   | -0.133                   | -0.063          | 0.070           | -0.145          | -0.063          | 0.082           | -0.145          | 0.325           | 0.470           | -0.276          | -0.068          | 0.208           | -0.263          | -0.068          | 0.196           | 0.1500 |
| 0.2000                   | -0.130                   | -0.066          | 0.064           | -0.136          | -0.068          | 0.068           | -0.135          | 0.330           | 0.464           | -0.236          | -0.093          | 0.143           | -0.244          | -0.094          | 0.150           | 0.2000 |
| 0.3000                   | -0.122                   | -0.085          | 0.037           | -0.116          | -0.068          | 0.048           | -0.111          | 0.330           | 0.441           | -0.201          | -0.091          | 0.110           | -0.180          | -0.092          | 0.088           | 0.3000 |
| 0.4000                   | -0.103                   | -0.074          | 0.029           | -0.094          | -0.063          | 0.032           | -0.093          | 0.325           | 0.417           | -0.152          | -0.095          | 0.057           | -0.176          | -0.092          | 0.084           | 0.4000 |
| 0.5000                   | -0.074                   | -0.055          | 0.019           | -0.072          | -0.045          | 0.027           | -0.075          | 0.367           | 0.442           | -0.136          | -0.070          | 0.066           | -0.135          | -0.069          | 0.066           | 0.5000 |
| 0.6000                   | -0.044                   | -0.035          | 0.009           | -0.043          | -0.033          | 0.010           | -0.046          | 0.371           | 0.417           | -0.091          | -0.052          | 0.039           | -0.120          | -0.047          | 0.072           | 0.6000 |
| 0.7000                   | -0.015                   | -0.018          | -0.003          | -0.022          | -0.031          | -0.010          |                 | 0.342           |                 | -0.027          | -0.077          | -0.050          | -0.089          | -0.027          | 0.061           | 0.7000 |
| 0.8000                   | 0.004                    | -0.005          | -0.009          | 0.000           | -0.030          | -0.030          | -0.004          | 0.367           | 0.371           | -0.006          | -0.026          | -0.020          |                 |                 | 0.8000          |        |
| 1.0000                   | 0.011                    | 0.004           | -0.007          | 0.048           | -0.026          | -0.074          | 0.016           | 0.578           | 0.562           | -0.091          | 0.305           | 0.397           | 0.094           | 0.020           | -0.074          | 1.0000 |
| M = 0.696      α = -0.06 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.034                    | -0.236          | -0.271          | 0.037           | -0.371          | -0.408          | 0.130           | -0.288          | -0.418          | 0.097           | -0.342          | -0.438          | 0.004           | -0.324          | -0.328          | 0.0000 |
| 0.0250                   | -0.024                   | -0.224          | -0.200          | -0.033          | -0.297          | -0.264          | 0.018           | -0.261          | -0.279          | 0.012           | -0.257          | -0.269          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.067                   | -0.216          | -0.148          | -0.078          | -0.246          | -0.167          | -0.053          | -0.234          | -0.181          | -0.042          | -0.198          | -0.156          | -0.042          | -0.212          | -0.170          | 0.0500 |
| 0.1000                   | -0.107                   | -0.212          | -0.104          | -0.092          | -0.206          | -0.113          | -0.068          | -0.176          | -0.108          | -0.058          | -0.160          | -0.101          | -0.062          | -0.149          | -0.086          | 0.1000 |
| 0.1500                   | -0.116                   | -0.184          | -0.068          | -0.099          | -0.180          | -0.081          | -0.074          | -0.151          | -0.077          | -0.064          | -0.135          | -0.071          | -0.058          | -0.134          | -0.077          | 0.1500 |
| 0.2000                   | -0.115                   | -0.169          | -0.054          | -0.099          | -0.167          | -0.069          | -0.079          | -0.138          | -0.058          | -0.063          | -0.128          | -0.065          | -0.056          | -0.124          | -0.067          | 0.2000 |
| 0.3000                   | -0.117                   | -0.175          | -0.059          | -0.090          | -0.144          | -0.054          | -0.071          | -0.116          | -0.046          | -0.054          | -0.112          | -0.057          | -0.054          | -0.109          | -0.055          | 0.3000 |
| 0.4000                   | -0.100                   | -0.195          | -0.035          | -0.073          | -0.116          | -0.043          | -0.062          | -0.099          | -0.037          | -0.045          | -0.097          | -0.047          | -0.054          | -0.092          | -0.038          | 0.4000 |
| 0.5000                   | -0.068                   | -0.099          | -0.031          | -0.056          | -0.081          | -0.024          | -0.050          | -0.066          | -0.016          | -0.042          | -0.084          | -0.041          | -0.051          | -0.076          | -0.026          | 0.5000 |
| 0.6000                   | -0.037                   | -0.057          | -0.020          | -0.035          | -0.053          | -0.018          | -0.028          | -0.055          | -0.027          | -0.033          | -0.071          | -0.039          | -0.044          | -0.052          | -0.008          | 0.6000 |
| 0.7000                   | -0.010                   | -0.032          | -0.022          | -0.014          | -0.051          | -0.037          |                 | -0.063          |                 | -0.020          | -0.060          | -0.040          | -0.041          | -0.049          | -0.008          | 0.7000 |
| 0.8000                   | 0.008                    | -0.019          | -0.027          | 0.008           | -0.041          | -0.049          | -0.002          | -0.045          | -0.042          | -0.008          | -0.038          | -0.030          |                 |                 | 0.8000          |        |
| 1.0000                   | 0.012                    | -0.030          | -0.043          | 0.057           | 0.006           | -0.051          | -0.002          | 0.073           | 0.075           | 0.011           | 0.036           | 0.025           | -0.055          | -0.168          | -0.113          | 1.0000 |
| M = 0.701      α = 03.68 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.137                   | -0.175          | -0.037          | 0.083           | -0.483          | -0.566          | 0.255           | -0.516          | -0.771          | 0.206           | -0.475          | -0.681          | 0.145           | -0.933          | -1.078          | 0.0000 |
| 0.0250                   | -0.147                   | -0.196          | -0.049          | -0.007          | -0.398          | -0.391          | 0.102           | -0.448          | -0.550          | 0.102           | -0.473          | -0.575          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.155                   | -0.211          | -0.056          | -0.065          | -0.332          | -0.267          | 0.004           | -0.377          | -0.381          | 0.032           | -0.429          | -0.461          | 0.048           | -0.435          | -0.483          | 0.0500 |
| 0.1000                   | -0.164                   | -0.221          | -0.057          | -0.089          | -0.258          | -0.170          | -0.030          | -0.225          | -0.195          | -0.009          | -0.216          | -0.207          | -0.004          | -0.190          | -0.186          | 0.1000 |
| 0.1500                   | -0.159                   | -0.206          | -0.047          | -0.096          | -0.207          | -0.111          | -0.042          | -0.197          | -0.155          | -0.026          | -0.188          | -0.163          | -0.013          | -0.200          | -0.186          | 0.1500 |
| 0.2000                   | -0.149                   | -0.198          | -0.049          | -0.099          | -0.185          | -0.086          | -0.056          | -0.180          | -0.125          | -0.032          | -0.173          | -0.141          | -0.021          | -0.171          | -0.150          | 0.2000 |
| 0.3000                   | -0.139                   | -0.199          | -0.060          | -0.090          | -0.158          | -0.069          | -0.054          | -0.140          | -0.085          | -0.033          | -0.148          | -0.114          | -0.029          | -0.141          | -0.112          | 0.3000 |
| 0.4000                   | -0.115                   | -0.163          | -0.048          | -0.074          | -0.131          | -0.057          | -0.050          | -0.120          | -0.070          | -0.039          | -0.121          | -0.082          | -0.036          | -0.119          | -0.083          | 0.4000 |
| 0.5000                   | -0.078                   | -0.126          | -0.048          | -0.057          | -0.092          | -0.035          | -0.044          | -0.081          | -0.037          | -0.035          | -0.100          | -0.065          | -0.039          | -0.097          | -0.059          | 0.5000 |
| 0.6000                   | -0.046                   | -0.090          | -0.044          | -0.034          | -0.068          | -0.034          | -0.030          | -0.069          | -0.040          | -0.033          | -0.085          | -0.053          | -0.037          | -0.068          | -0.032          | 0.6000 |
| 0.7000                   | -0.016                   | -0.060          | -0.044          | -0.018          | -0.060          | -0.041          |                 | -0.067          |                 | -0.021          | -0.071          | -0.050          | -0.040          | -0.055          | -0.015          | 0.7000 |
| 0.8000                   | -0.040                   | -0.040          | -0.002          | -0.044          | -0.043          | -0.011          | -0.045          | -0.043          | -0.020          | -0.045          | -0.025          |                 |                 |                 | 0.8000          |        |
| 1.0000                   | -0.011                   | -0.030          | -0.019          | 0.036           | 0.008           | -0.028          | -0.005          | 0.052           | 0.057           | -0.051          | 0.038           | 0.088           | -0.076          | -0.110          | -0.034          | 1.0000 |
| M = 0.699      α = 07.71 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.245                   | 0.220           | 1.465           | -0.701          | -0.085          | 0.615           | -0.083          | -0.168          | -0.085          | 0.163           | -0.571          | -0.734          | 0.184           | -0.995          | -1.179          | 0.0000 |
| 0.0250                   | -1.153                   | 0.184           | 1.337           | -0.616          | -0.106          | 0.510           | -0.136          | -0.187          | -0.052          | 0.068           | -0.434          | -0.502          |                 |                 |                 | 0.0250 |
| 0.0500                   | -1.066                   | 0.142           | 1.208           | -0.540          | -0.126          | 0.414           | -0.163          | -0.194          | -0.032          | 0.003           | -0.328          | -0.331          | 0.072           | -0.556          | -0.628          | 0.0500 |
| 0.1000                   | -0.907                   | 0.043           | 0.950           | -0.416          | -0.166          | 0.250           | -0.142          | -0.174          | -0.032          | -0.031          | -0.208          | -0.176          | 0.010           | -0.304          | -0.314          | 0.1000 |
| 0.1500                   | -0.746                   | 0.000           | 0.746           | -0.340          | -0.153          | 0.188           | -0.128          | -0.166          | -0.038          | -0.045          | -0.175          | -0.130          | -0.002          | -0.238          | -0.236          | 0.1500 |
| 0.2000                   | -0.609                   | -0.030          | 0.579           | -0.287          | -0.159          | 0.128           | -0.122          | -0.162          | -0.040          | -0.050          | -0.156          | -0.106          | -0.015          | -0.187          | -0.172          | 0.2000 |
| 0.3000                   | -0.391                   | -0.083          | 0.307           | -0.208          | -0.168          | 0.039           | -0.103          | -0.145          | -0.042          | -0.051          | -0.136          | -0.084          | -0.029          | -0.146          | -0.117          | 0.3000 |
| 0.4000                   | -0.256                   | -0.077          | 0.179           | -0.150          | -0.181          | -0.031          | -0.086          | -0.142          | -0.056          | -0.057          | -0.112          | -0.054          | -0.042          | -0.121          | -0.079          | 0.4000 |
| 0.5000                   | -0.164                   | -0.067          | 0.098           | -0.106          | -0.152          | -0.046          | -0.076          | -0.121          | -0.048          | -0.053          | -0.097          | -0.064          | -0.047          | -0.095          | -0.048          | 0.5000 |
| 0.6000                   | -0.103                   | -0.043          | 0.060           | -0.077          | -0.139          | -0.061          | -0.054          | -0.112          | -0.057          | -0.051          | -0.087          | -0.036          | -0.050          | -0.066          | -0.016          | 0.6000 |
| 0.7000                   | -0.055                   | -0.027          | 0.028           | -0.055          | -0.149          | -0.094          |                 | -0.107          |                 | -0.041          | -0.071          | -0.030          | -0.056          | -0.054          | 0.002           | 0.7000 |
| 0.8000                   | -0.030                   | -0.019          | 0.011           | 0.035           | -0.128          | -0.093          | -0.040          | -0.090          | -0.050          | -0.046          | -0.055          | -0.010          |                 |                 | 0.8000          |        |
| 1.0000                   | -0.051                   | -0.026          | 0.025           | -0.006          | 0.004           | 0.009           | -0.060          | -0.022          | 0.038           | -0.102          | -0.027          | 0.075           | -0.093          | -0.118          | -0.025          | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

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| x/c                      | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 0.700      α = 11.74 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.801          | 0.382           | 2.183           | -1.051          | 0.123           | 1.174           | -0.804          | 0.064           | 0.867           | -0.079          | -0.205          | -0.126          | 0.119           | -0.935          | -1.054          | 0.0000 |
| 0.0250                   | -1.695          | 0.261           | 1.956           | -0.901          | 0.041           | 0.942           | -0.587          | -0.019          | 0.568           | -0.121          | -0.193          | -0.072          |                 |                 |                 | 0.0250 |
| 0.0500                   | -1.577          | 0.161           | 1.738           | -0.780          | -0.022          | 0.758           | -0.435          | -0.076          | 0.359           | -0.143          | -0.184          | -0.040          | 0.035           | -0.474          | -0.508          | 0.0500 |
| 0.1000                   | -1.306          | 0.021           | 1.326           | -0.620          | -0.088          | 0.532           | -0.324          | -0.114          | 0.211           | -0.132          | -0.175          | -0.043          | -0.010          | -0.240          | -0.230          | 0.1000 |
| 0.1500                   | -1.186          | -0.029          | 1.157           | -0.531          | -0.090          | 0.441           | -0.273          | -0.126          | 0.147           | -0.123          | -0.170          | -0.046          | -0.016          | -0.235          | -0.219          | 0.1500 |
| 0.2000                   | -1.046          | -0.056          | 0.988           | -0.456          | -0.102          | 0.354           | -0.241          | -0.133          | 0.108           | -0.115          | -0.167          | -0.052          | -0.026          | -0.207          | -0.181          | 0.2000 |
| 0.3000                   | -0.806          | -0.104          | 0.702           | -0.340          | -0.110          | 0.230           | -0.187          | -0.130          | 0.057           | -0.093          | -0.158          | -0.065          | -0.034          | -0.179          | -0.146          | 0.3000 |
| 0.4000                   | -0.590          | -0.096          | 0.494           | -0.258          | -0.119          | 0.138           | -0.152          | -0.134          | 0.017           | -0.089          | -0.150          | -0.061          | -0.043          | -0.158          | -0.114          | 0.4000 |
| 0.5000                   | -0.416          | -0.080          | 0.335           | -0.190          | -0.096          | 0.094           | -0.119          | -0.121          | -0.002          | -0.077          | -0.141          | -0.064          | -0.046          | -0.129          | -0.083          | 0.5000 |
| 0.6000                   | -0.293          | -0.054          | 0.240           | -0.140          | -0.086          | 0.054           | -0.086          | -0.123          | -0.037          | -0.066          | -0.135          | -0.069          | -0.047          | -0.094          | -0.047          | 0.6000 |
| 0.7000                   | -0.200          | -0.038          | 0.161           | -0.107          | -0.095          | 0.012           | -0.131          |                 | -0.053          | -0.119          | -0.066          | -0.058          | -0.081          | -0.022          | 0.7000          |        |
| 0.8000                   | -0.138          | -0.035          | 0.103           | -0.076          | -0.093          | -0.017          | -0.056          | -0.118          | -0.062          | -0.058          | -0.101          | -0.042          |                 |                 | 0.8000          |        |
| 1.0000                   | -0.109          | -0.063          | 0.046           | -0.015          | -0.055          | -0.039          | -0.073          | -0.030          | 0.043           | -0.122          | -0.057          | 0.065           | -0.154          | -0.164          | -0.010          | 1.0000 |
| M = 0.699      α = 15.76 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.935          | 0.638           | 1.573           | -0.979          | 0.295           | 1.274           | -1.623          | 0.154           | 1.777           | -0.149          | -0.279          | -0.131          | 0.096           | -1.141          | -1.237          | 0.0000 |
| 0.0250                   | -0.922          | 0.526           | 1.448           | -0.985          | 0.155           | 1.140           | -1.325          | 0.031           | 1.356           | -0.206          | -0.267          | -0.061          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.915          | 0.413           | 1.328           | -0.989          | 0.049           | 1.038           | -1.076          | -0.055          | 1.020           | -0.242          | -0.259          | -0.017          | -0.026          | -0.709          | -0.683          | 0.0500 |
| 0.1000                   | -0.922          | 0.179           | 1.101           | -0.993          | -0.063          | 0.930           | -0.723          | -0.120          | 0.603           | -0.244          | -0.254          | -0.010          | -0.097          | -0.451          | -0.354          | 0.1000 |
| 0.1500                   | -0.936          | 0.065           | 1.001           | -1.004          | -0.084          | 0.920           | -0.650          | -0.143          | 0.507           | -0.254          | -0.246          | 0.008           | -0.114          | -0.367          | -0.253          | 0.1500 |
| 0.2000                   | -0.952          | -0.001          | 0.951           | -1.021          | -0.112          | 0.909           | -0.601          | -0.161          | 0.440           | -0.260          | -0.246          | 0.014           | -0.132          | -0.318          | -0.187          | 0.2000 |
| 0.3000                   | -0.999          | -0.104          | 0.895           | -1.043          | -0.136          | 0.907           | -0.518          | -0.170          | 0.348           | -0.274          | -0.241          | 0.033           | -0.154          | -0.293          | -0.139          | 0.3000 |
| 0.4000                   | -1.065          | -0.125          | 0.940           | -0.983          | -0.147          | 0.836           | -0.471          | -0.179          | 0.293           | -0.305          | -0.238          | 0.067           | -0.174          | -0.273          | -0.099          | 0.4000 |
| 0.5000                   | -1.124          | -0.122          | 1.002           | -0.791          | -0.132          | 0.659           | -0.444          | -0.172          | 0.272           | -0.316          | -0.233          | 0.083           | -0.174          | -0.240          | -0.066          | 0.5000 |
| 0.6000                   | -1.040          | -0.102          | 0.938           | -0.550          | -0.126          | 0.424           | -0.419          | -0.180          | 0.239           | -0.304          | -0.232          | 0.072           | -0.167          | -0.207          | -0.040          | 0.6000 |
| 0.7000                   | -0.677          | -0.086          | 0.590           | -0.365          | -0.143          | 0.222           | -0.357          | -0.199          | -0.281          | -0.223          | 0.058           | -0.179          | -0.195          | -0.016          | 0.7000          |        |
| 0.8000                   | -0.286          | -0.081          | 0.204           | -0.290          | -0.158          | 0.132           | -0.357          | -0.206          | 0.151           | -0.261          | -0.208          | 0.053           |                 |                 | 0.8000          |        |
| 1.0000                   | 0.580           | -0.103          | -0.683          | -0.465          | -0.180          | 0.285           | -0.282          | -0.187          | 0.095           | -0.232          | -0.161          | 0.072           | -0.327          | -0.290          | 0.037           | 1.0000 |
| M = 0.903      α = 03.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.082          | -0.304          | -0.222          | 0.010           | -0.629          | -0.639          | 0.164           | -0.574          | -0.738          | 0.212           | -0.467          | -0.679          | 0.148           | -0.942          | -1.090          | 0.0000 |
| 0.0250                   | -0.120          | -0.316          | -0.196          | -0.087          | -0.549          | -0.462          | 0.047           | -0.550          | -0.597          | 0.101           | -0.528          | -0.629          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.152          | -0.325          | -0.173          | -0.151          | -0.489          | -0.338          | -0.028          | -0.496          | -0.467          | 0.026           | -0.515          | -0.541          | 0.049           | -0.499          | -0.548          | 0.0500 |
| 0.1000                   | -0.200          | -0.336          | -0.136          | -0.180          | -0.427          | -0.247          | -0.053          | -0.300          | -0.247          | -0.011          | -0.264          | -0.253          | -0.005          | -0.259          | -0.255          | 0.1000 |
| 0.1500                   | -0.222          | -0.326          | -0.104          | -0.186          | -0.368          | -0.181          | -0.063          | -0.237          | -0.174          | -0.029          | -0.215          | -0.185          | -0.014          | -0.224          | -0.210          | 0.1500 |
| 0.2000                   | -0.228          | -0.321          | -0.092          | -0.183          | -0.309          | -0.125          | -0.067          | -0.221          | -0.154          | -0.035          | -0.201          | -0.165          | -0.023          | -0.198          | -0.175          | 0.2000 |
| 0.3000                   | -0.237          | -0.326          | -0.089          | -0.132          | -0.216          | -0.084          | -0.060          | -0.167          | -0.107          | -0.037          | -0.172          | -0.135          | -0.030          | -0.171          | -0.141          | 0.3000 |
| 0.4000                   | -0.213          | -0.245          | -0.033          | -0.098          | -0.162          | -0.064          | -0.052          | -0.143          | -0.090          | -0.044          | -0.145          | -0.101          | -0.038          | -0.147          | -0.109          | 0.4000 |
| 0.5000                   | -0.155          | -0.169          | -0.014          | -0.057          | -0.102          | -0.045          | -0.047          | -0.102          | -0.055          | -0.041          | -0.122          | -0.080          | -0.041          | -0.115          | -0.073          | 0.5000 |
| 0.6000                   | -0.060          | -0.102          | -0.042          | -0.025          | -0.071          | -0.046          | -0.035          | -0.089          | -0.054          | -0.032          | -0.115          | -0.083          | -0.041          | -0.084          | -0.043          | 0.6000 |
| 0.7000                   | -0.014          | -0.063          | -0.049          | -0.021          | -0.064          | -0.042          | -0.086          |                 | -0.022          | -0.089          | -0.067          | -0.049          | -0.069          | -0.021          | 0.7000          |        |
| 0.8000                   | -0.003          | -0.041          | -0.038          | -0.009          | -0.055          | -0.046          | -0.015          | -0.064          | -0.049          | -0.022          | -0.059          | -0.037          |                 |                 | 0.8000          |        |
| 1.0000                   | -0.086          | -0.052          | 0.035           | 0.043           | -0.036          | -0.079          | 0.000           | 0.036           | 0.036           | -0.055          | 0.016           | 0.071           | -0.113          | -0.115          | -0.001          | 1.0000 |
| M = 0.951      α = 03.82 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.198          | -0.357          | -0.159          | -0.032          | -0.673          | -0.641          | 0.075           | -0.813          | -0.887          | 0.052           | -0.770          | -0.821          | 0.217           | -0.512          | -0.729          | 0.0000 |
| 0.0250                   | -0.208          | -0.353          | -0.145          | -0.131          | -0.591          | -0.461          | -0.082          | -0.715          | -0.633          | -0.059          | -0.731          | -0.672          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.222          | -0.352          | -0.131          | -0.197          | -0.532          | -0.335          | -0.184          | -0.648          | -0.465          | -0.124          | -0.700          | -0.576          | 0.125           | -0.422          | -0.547          | 0.0500 |
| 0.1000                   | -0.260          | -0.364          | -0.103          | -0.235          | -0.482          | -0.247          | -0.224          | -0.610          | -0.385          | -0.117          | -0.658          | -0.542          | 0.073           | -0.340          | -0.413          | 0.1000 |
| 0.1500                   | -0.272          | -0.370          | -0.098          | -0.262          | -0.436          | -0.174          | -0.260          | -0.474          | -0.214          | -0.088          | -0.379          | -0.291          | 0.062           | -0.265          | -0.327          | 0.1500 |
| 0.2000                   | -0.277          | -0.369          | -0.092          | -0.287          | -0.438          | -0.151          | -0.281          | -0.484          | -0.202          | -0.048          | -0.253          | -0.205          | 0.050           | -0.182          | -0.232          | 0.2000 |
| 0.3000                   | -0.298          | -0.411          | -0.114          | -0.320          | -0.454          | -0.133          | -0.239          | -0.410          | -0.171          | 0.008           | -0.090          | -0.098          | 0.033           | -0.112          | -0.146          | 0.3000 |
| 0.4000                   | -0.321          | -0.449          | -0.128          | -0.315          | -0.416          | -0.102          | -0.106          | -0.191          | -0.085          | 0.023           | -0.051          | -0.074          | 0.022           | -0.093          | -0.115          | 0.4000 |
| 0.5000                   | -0.319          | -0.387          | -0.069          | -0.249          | -0.229          | 0.020           | -0.008          | -0.048          | -0.040          | 0.018           | -0.045          | -0.063          | 0.014           | -0.079          | -0.093          | 0.5000 |
| 0.6000                   | -0.254          | -0.251          | 0.003           | -0.042          | -0.073          | 0.031           | 0.026           | -0.022          | -0.049          | 0.018           | -0.046          | -0.065          | 0.007           | -0.050          | -0.057          | 0.6000 |
| 0.7000                   | -0.046          | -0.108          | -0.062          | 0.009           | -0.031          | -0.040          | -0.025          |                 | 0.022           | -0.037          | -0.059          | -0.009          | -0.036          | -0.027          | 0.7000          |        |
| 0.8000                   | 0.022           | -0.051          | -0.073          | 0.032           | -0.017          | -0.049          | 0.033           | -0.013          | -0.046          | 0.018           | -0.013          | -0.030          |                 |                 | 0.8000          |        |
| 1.0000                   | -0.260          | -0.193          | 0.066           | -0.010          | -0.073          | -0.063          | -0.043          | 0.053           | 0.096           | -0.017          | 0.080           | 0.097           | -0.113          | -0.084          | 0.029           | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

| x/c                       | y/b=0.150 |        |        | y/b=0.300 |        |        | y/b=0.450 |        |        | y/b=0.600 |        |        | y/b=0.750 |        |        | x/c    |
|---------------------------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|--------|
|                           | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    | CpL       | CpR    | ΔCp    |        |
| M = 1.004      α = 03.93  |           |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                    | -0.188    | -0.261 | -0.073 | -0.041    | -0.603 | -0.561 | 0.027     | -0.720 | -0.747 | -0.003    | -0.745 | -0.741 | -0.094    | -0.699 | -0.604 | 0.0000 |
| 0.0250                    | -0.202    | -0.282 | -0.080 | -0.111    | -0.517 | -0.406 | -0.080    | -0.629 | -0.549 | -0.114    | -0.677 | -0.563 | -0.184    | -0.665 | -0.481 | 0.0250 |
| 0.0500                    | -0.213    | -0.296 | -0.083 | -0.161    | -0.458 | -0.296 | -0.154    | -0.565 | -0.511 | -0.189    | -0.635 | -0.445 | -0.184    | -0.665 | -0.481 | 0.0500 |
| 0.1000                    | -0.227    | -0.304 | -0.077 | -0.204    | -0.421 | -0.217 | -0.204    | -0.519 | -0.435 | -0.232    | -0.623 | -0.392 | -0.215    | -0.652 | -0.437 | 0.1000 |
| 0.1500                    | -0.245    | -0.315 | -0.071 | -0.229    | -0.382 | -0.152 | -0.232    | -0.446 | -0.214 | -0.255    | -0.478 | -0.223 | -0.187    | -0.659 | -0.471 | 0.1500 |
| 0.2000                    | -0.246    | -0.319 | -0.073 | -0.251    | -0.381 | -0.130 | -0.277    | -0.426 | -0.150 | -0.271    | -0.450 | -0.180 | -0.145    | -0.479 | -0.333 | 0.2000 |
| 0.3000                    | -0.259    | -0.357 | -0.098 | -0.275    | -0.404 | -0.129 | -0.283    | -0.434 | -0.151 | -0.269    | -0.467 | -0.198 | -0.079    | -0.343 | -0.265 | 0.3000 |
| 0.4000                    | -0.282    | -0.401 | -0.119 | -0.296    | -0.414 | -0.118 | -0.310    | -0.435 | -0.129 | -0.188    | -0.342 | -0.154 | -0.063    | -0.222 | -0.159 | 0.4000 |
| 0.5000                    | -0.289    | -0.389 | -0.100 | -0.310    | -0.384 | -0.074 | -0.266    | -0.303 | -0.036 | -0.136    | -0.245 | -0.109 | -0.068    | -0.202 | -0.134 | 0.5000 |
| 0.6000                    | -0.309    | -0.362 | -0.053 | -0.259    | -0.263 | -0.004 | -0.133    | -0.213 | -0.080 | -0.016    | -0.195 | -0.179 | -0.065    | -0.164 | -0.099 | 0.6000 |
| 0.7000                    | -0.245    | -0.260 | -0.015 | -0.161    | -0.189 | -0.029 | -0.165    | -0.165 | -0.051 | -0.175    | -0.124 | -0.068 | -0.105    | -0.037 | -0.070 | 0.7000 |
| 0.8000                    | -0.095    | -0.171 | -0.076 | -0.020    | -0.147 | -0.128 | -0.048    | -0.150 | -0.102 | -0.068    | -0.107 | -0.039 | -0.107    | 0.207  | 0.314  | 0.8000 |
| 1.0000                    | 0.464     | -0.025 | -0.490 | 0.390     | -0.159 | -0.549 | -0.204    | -0.220 | -0.015 | -0.049    | 0.171  | 0.219  | -0.107    | 0.207  | 0.314  | 1.0000 |
| M = 1.050      α = 03.93  |           |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                    | -0.177    | -0.204 | -0.026 | -0.106    | -0.556 | -0.450 | -0.038    | -0.564 | -0.527 | 0.047     | -0.682 | -0.729 | -0.057    | -0.599 | -0.542 | 0.0000 |
| 0.0250                    | -0.197    | -0.221 | -0.024 | -0.128    | -0.450 | -0.322 | -0.080    | -0.504 | -0.424 | -0.072    | -0.581 | -0.509 | -0.173    | -0.561 | -0.389 | 0.0250 |
| 0.0500                    | -0.212    | -0.234 | -0.022 | -0.148    | -0.381 | -0.233 | -0.115    | -0.457 | -0.343 | -0.154    | -0.519 | -0.364 | -0.231    | -0.517 | -0.319 | 0.0500 |
| 0.1000                    | -0.226    | -0.246 | -0.020 | -0.178    | -0.349 | -0.171 | -0.160    | -0.403 | -0.243 | -0.206    | -0.507 | -0.301 | -0.231    | -0.517 | -0.319 | 0.1000 |
| 0.1500                    | -0.228    | -0.263 | -0.034 | -0.193    | -0.311 | -0.118 | -0.189    | -0.373 | -0.184 | -0.223    | -0.411 | -0.189 | -0.232    | -0.538 | -0.306 | 0.1500 |
| 0.2000                    | -0.229    | -0.271 | -0.042 | -0.211    | -0.298 | -0.086 | -0.213    | -0.356 | -0.143 | -0.232    | -0.386 | -0.153 | -0.216    | -0.436 | -0.219 | 0.2000 |
| 0.3000                    | -0.233    | -0.294 | -0.061 | -0.233    | -0.309 | -0.076 | -0.240    | -0.357 | -0.117 | -0.247    | -0.411 | -0.164 | -0.161    | -0.409 | -0.247 | 0.3000 |
| 0.4000                    | -0.249    | -0.325 | -0.076 | -0.253    | -0.323 | -0.070 | -0.253    | -0.371 | -0.119 | -0.204    | -0.370 | -0.165 | -0.110    | -0.298 | -0.188 | 0.4000 |
| 0.5000                    | -0.250    | -0.317 | -0.067 | -0.255    | -0.320 | -0.065 | -0.249    | -0.300 | -0.051 | -0.165    | -0.246 | -0.081 | -0.085    | -0.236 | -0.152 | 0.5000 |
| 0.6000                    | -0.248    | -0.307 | -0.059 | -0.229    | -0.237 | -0.008 | -0.158    | -0.204 | -0.046 | -0.080    | -0.197 | -0.117 | -0.051    | -0.209 | -0.159 | 0.6000 |
| 0.7000                    | -0.185    | -0.213 | -0.029 | -0.126    | -0.188 | -0.062 | -0.160    | -0.160 | -0.029 | -0.173    | -0.144 | -0.083 | -0.083    | -0.207 | -0.124 | 0.7000 |
| 0.8000                    | -0.070    | -0.155 | -0.086 | 0.001     | -0.143 | -0.144 | -0.050    | -0.136 | -0.086 | -0.076    | -0.177 | -0.101 | -0.101    | -0.207 | -0.124 | 0.8000 |
| 1.0000                    | 0.316     | -0.147 | -0.463 | 0.325     | -0.068 | -0.393 | -0.043    | -0.148 | -0.105 | -0.463    | -0.268 | 0.195  | -0.580    | -0.353 | 0.227  | 1.0000 |
| M = 1.099      α = 03.93  |           |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                    | -0.130    | -0.220 | -0.089 | 0.043     | -0.486 | -0.529 | 0.126     | -0.613 | -0.739 | 0.117     | -0.631 | -0.749 | 0.028     | -0.556 | -0.584 | 0.0000 |
| 0.0250                    | -0.136    | -0.236 | -0.100 | -0.032    | -0.433 | -0.401 | 0.018     | -0.523 | -0.541 | 0.008     | -0.562 | -0.570 | -0.084    | -0.530 | -0.445 | 0.0250 |
| 0.0500                    | -0.144    | -0.245 | -0.101 | -0.083    | -0.391 | -0.308 | -0.056    | -0.462 | -0.407 | -0.069    | -0.519 | -0.450 | -0.147    | -0.517 | -0.371 | 0.0500 |
| 0.1000                    | -0.167    | -0.238 | -0.071 | -0.117    | -0.344 | -0.227 | -0.098    | -0.430 | -0.332 | -0.125    | -0.510 | -0.385 | -0.159    | -0.519 | -0.360 | 0.1000 |
| 0.1500                    | -0.166    | -0.245 | -0.079 | -0.127    | -0.289 | -0.162 | -0.125    | -0.347 | -0.222 | -0.147    | -0.397 | -0.250 | -0.159    | -0.519 | -0.360 | 0.1500 |
| 0.2000                    | -0.160    | -0.237 | -0.077 | -0.152    | -0.277 | -0.124 | -0.138    | -0.317 | -0.179 | -0.157    | -0.311 | -0.154 | -0.163    | -0.405 | -0.242 | 0.2000 |
| 0.3000                    | -0.161    | -0.264 | -0.102 | -0.169    | -0.291 | -0.123 | -0.166    | -0.306 | -0.140 | -0.174    | -0.345 | -0.171 | -0.134    | -0.347 | -0.212 | 0.3000 |
| 0.4000                    | -0.171    | -0.284 | -0.113 | -0.195    | -0.296 | -0.101 | -0.185    | -0.314 | -0.129 | -0.174    | -0.337 | -0.163 | -0.080    | -0.257 | -0.176 | 0.4000 |
| 0.5000                    | -0.181    | -0.279 | -0.098 | -0.191    | -0.276 | -0.085 | -0.202    | -0.279 | -0.077 | -0.118    | -0.224 | -0.106 | -0.052    | -0.157 | -0.106 | 0.5000 |
| 0.6000                    | -0.189    | -0.261 | -0.071 | -0.176    | -0.215 | -0.039 | -0.147    | -0.170 | -0.024 | -0.082    | -0.152 | -0.071 | 0.008     | -0.113 | -0.121 | 0.6000 |
| 0.7000                    | -0.169    | -0.165 | -0.003 | -0.127    | -0.127 | 0.001  | -0.096    | -0.096 | -0.076 | -0.042    | -0.080 | -0.122 | 0.015     | -0.106 | -0.122 | 0.7000 |
| 0.8000                    | -0.027    | -0.101 | -0.074 | 0.023     | -0.069 | -0.092 | 0.023     | -0.052 | -0.076 | -0.008    | -0.078 | -0.086 | -0.078    | -0.106 | -0.122 | 0.8000 |
| 1.0000                    | 0.620     | -0.065 | -0.685 | 0.628     | -0.041 | -0.669 | 0.272     | -0.055 | -0.327 | -0.534    | -0.286 | 0.249  | -0.274    | -0.312 | -0.038 | 1.0000 |
| M = 1.300      α = -04.08 |           |        |        |           |        |        |           |        |        |           |        |        |           |        |        |        |
| 0.0000                    | -0.016    | 0.072  | 0.088  | -0.051    | 0.029  | 0.080  | -0.061    | 0.114  | 0.175  | -0.049    | 0.035  | 0.084  | -0.092    | -0.108 | -0.016 | 0.0000 |
| 0.0250                    | -0.015    | 0.082  | 0.096  | -0.080    | 0.019  | 0.098  | -0.097    | 0.039  | 0.136  | -0.110    | -0.007 | 0.103  | -0.158    | -0.070 | 0.088  | 0.0250 |
| 0.0500                    | -0.018    | 0.077  | 0.096  | -0.094    | 0.003  | 0.098  | -0.118    | -0.010 | 0.108  | -0.145    | -0.034 | 0.111  | -0.184    | -0.054 | 0.130  | 0.0500 |
| 0.1000                    | -0.041    | 0.026  | 0.068  | -0.081    | -0.042 | 0.039  | -0.117    | -0.028 | 0.089  | -0.137    | -0.046 | 0.091  | -0.169    | -0.060 | 0.109  | 0.1000 |
| 0.1500                    | -0.041    | 0.018  | 0.059  | -0.073    | -0.028 | 0.045  | -0.102    | -0.044 | 0.058  | -0.138    | -0.051 | 0.087  | -0.157    | -0.074 | 0.083  | 0.1500 |
| 0.2000                    | -0.040    | 0.017  | 0.057  | -0.079    | -0.021 | 0.058  | -0.099    | -0.053 | 0.046  | -0.138    | -0.063 | 0.074  | -0.157    | -0.074 | 0.083  | 0.2000 |
| 0.3000                    | -0.052    | -0.029 | 0.022  | -0.078    | -0.042 | 0.036  | -0.102    | -0.070 | 0.032  | -0.125    | -0.074 | 0.051  | -0.141    | -0.104 | 0.037  | 0.3000 |
| 0.4000                    | -0.057    | -0.043 | 0.014  | -0.087    | -0.067 | 0.019  | -0.107    | -0.071 | 0.036  | -0.120    | -0.101 | 0.019  | -0.139    | -0.132 | 0.007  | 0.4000 |
| 0.5000                    | -0.103    | -0.090 | 0.013  | -0.109    | -0.100 | 0.009  | -0.122    | -0.098 | 0.024  | -0.136    | -0.122 | 0.014  | -0.151    | -0.129 | 0.022  | 0.5000 |
| 0.6000                    | -0.075    | -0.085 | -0.009 | -0.096    | -0.086 | 0.010  | -0.125    | -0.100 | 0.026  | -0.127    | -0.124 | 0.003  | -0.141    | -0.126 | 0.015  | 0.6000 |
| 0.7000                    | -0.082    | -0.078 | 0.004  | -0.096    | -0.093 | 0.003  | -0.117    | -0.117 | -0.116 | -0.133    | -0.018 | -0.134 | -0.134    | -0.135 | -0.002 | 0.7000 |
| 0.8000                    | -0.076    | -0.096 | -0.020 | -0.078    | -0.097 | -0.019 | -0.078    | -0.129 | -0.051 | -0.098    | -0.154 | -0.055 | -0.134    | -0.135 | -0.002 | 0.8000 |
| 1.0000                    | -0.023    | -0.208 | -0.184 | 0.013     | -0.102 | -0.115 | 0.043     | -0.137 | -0.180 | -0.045    | -0.228 | -0.183 | -0.134    | -0.234 | -0.100 | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  
 $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

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| x/c                      | y/b=0.150                 |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub>           | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
|                          | M = 1.303      α = -00.10 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.024                     | -0.094          | -0.118          | 0.007           | -0.154          | -0.161          | 0.071           | -0.102          | -0.173          | 0.050           | -0.225          | -0.276          | -0.009          | -0.331          | -0.321          | 0.0000 |
| 0.0250                   | 0.017                     | -0.091          | -0.108          | -0.021          | -0.165          | -0.144          | -0.012          | -0.175          | -0.163          | -0.030          | -0.216          | -0.186          |                 |                 |                 | 0.0250 |
| 0.0500                   |                           | -0.091          | -0.090          | -0.042          | -0.167          | -0.126          | -0.065          | -0.210          | -0.145          | -0.082          | -0.205          | -0.124          | -0.103          | -0.248          | -0.145          | 0.0500 |
| 0.1000                   | -0.069                    | -0.099          | -0.030          | -0.062          | -0.146          | -0.083          | -0.074          | -0.164          | -0.089          | -0.103          | -0.183          | -0.080          | -0.147          | -0.202          | -0.055          | 0.1000 |
| 0.1500                   | -0.055                    | -0.108          | -0.053          | -0.070          | -0.119          | -0.049          | -0.087          | -0.152          | -0.065          | -0.121          | -0.172          | -0.051          | -0.142          | -0.190          | -0.049          | 0.1500 |
| 0.2000                   | -0.065                    | -0.105          | -0.040          | -0.084          | -0.150          | -0.066          | -0.102          | -0.157          | -0.056          | -0.129          | -0.175          | -0.045          | -0.137          | -0.185          | -0.049          | 0.2000 |
| 0.3000                   | -0.080                    | -0.118          | -0.038          | -0.101          | -0.163          | -0.062          | -0.116          | -0.171          | -0.056          | -0.132          | -0.188          | -0.056          | -0.132          | -0.192          | -0.060          | 0.3000 |
| 0.4000                   | -0.094                    | -0.130          | -0.036          | -0.113          | -0.151          | -0.038          | -0.125          | -0.188          | -0.063          | -0.141          | -0.191          | -0.050          | -0.145          | -0.197          | -0.052          | 0.4000 |
| 0.5000                   | -0.129                    | -0.159          | -0.030          | -0.135          | -0.168          | -0.034          | -0.141          | -0.180          | -0.039          | -0.153          | -0.190          | -0.038          | -0.157          | -0.165          | -0.008          | 0.5000 |
| 0.6000                   | -0.126                    | -0.169          | -0.043          | -0.126          | -0.177          | -0.050          | -0.146          | -0.174          | -0.028          | -0.147          | -0.190          | -0.043          | -0.156          | -0.177          | -0.021          | 0.6000 |
| 0.7000                   | -0.124                    | -0.162          | -0.038          | -0.128          | -0.170          | -0.043          | -0.146          | -0.169          |                 | -0.131          | -0.188          | -0.056          | -0.154          | -0.173          | -0.019          | 0.7000 |
| 0.8000                   | -0.099                    | -0.129          | -0.030          | -0.107          | -0.148          | -0.041          | -0.100          | -0.156          | -0.057          | -0.114          | -0.165          | -0.052          |                 |                 |                 | 0.8000 |
| 1.0000                   | 0.017                     | 0.015           | -0.002          | -0.003          | -0.059          | -0.057          | 0.021           | -0.111          | -0.132          | -0.074          | -0.060          | 0.014           | -0.148          | -0.065          | 0.083           | 1.0000 |
| M = 1.304      α = 03.78 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.079                    | -0.123          | -0.044          | -0.020          | -0.324          | -0.304          | 0.107           | -0.317          | -0.424          | 0.085           | -0.445          | -0.530          | 0.024           | -0.505          | -0.529          | 0.0000 |
| 0.0250                   | -0.083                    | -0.122          | -0.039          | -0.041          | -0.299          | -0.258          | 0.006           | -0.320          | -0.326          | -0.006          | -0.404          | -0.398          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.092                    | -0.124          | -0.032          | -0.058          | -0.276          | -0.219          | -0.059          | -0.315          | -0.256          | -0.068          | -0.371          | -0.303          | -0.083          | -0.412          | -0.329          | 0.0500 |
| 0.1000                   | -0.125                    | -0.139          | -0.014          | -0.079          | -0.240          | -0.161          | -0.083          | -0.283          | -0.200          | -0.106          | -0.324          | -0.218          | -0.138          | -0.353          | -0.215          | 0.1000 |
| 0.1500                   | -0.129                    | -0.150          | -0.021          | -0.113          | -0.209          | -0.097          | -0.105          | -0.277          | -0.172          | -0.127          | -0.295          | -0.168          | -0.142          | -0.328          | -0.186          | 0.1500 |
| 0.2000                   | -0.132                    | -0.154          | -0.022          | -0.129          | -0.197          | -0.069          | -0.121          | -0.255          | -0.134          | -0.140          | -0.278          | -0.138          | -0.145          | -0.309          | -0.164          | 0.2000 |
| 0.3000                   | -0.139                    | -0.196          | -0.056          | -0.143          | -0.230          | -0.087          | -0.143          | -0.244          | -0.101          | -0.150          | -0.270          | -0.121          | -0.150          | -0.286          | -0.136          | 0.3000 |
| 0.4000                   | -0.146                    | -0.201          | -0.055          | -0.160          | -0.249          | -0.089          | -0.157          | -0.259          | -0.102          | -0.164          | -0.272          | -0.108          | -0.164          | -0.276          | -0.112          | 0.4000 |
| 0.5000                   | -0.160                    | -0.228          | -0.068          | -0.168          | -0.240          | -0.072          | -0.177          | -0.254          | -0.077          | -0.184          | -0.263          | -0.079          | -0.181          | -0.216          | -0.035          | 0.5000 |
| 0.6000                   | -0.174                    | -0.233          | -0.059          | -0.167          | -0.226          | -0.059          | -0.183          | -0.231          | -0.048          | -0.180          | -0.252          | -0.073          | -0.178          | -0.223          | -0.045          | 0.6000 |
| 0.7000                   | -0.168                    | -0.234          | -0.066          | -0.165          | -0.169          | -0.004          | -0.205          |                 |                 | -0.154          | -0.240          | -0.086          | -0.162          | -0.218          | -0.055          | 0.7000 |
| 0.8000                   | -0.082                    | -0.114          | -0.032          | -0.144          | -0.113          | 0.031           | -0.127          | -0.139          | -0.012          | -0.131          | -0.200          | -0.069          |                 |                 |                 | 0.8000 |
| 1.0000                   | 0.328                     | 0.487           | 0.159           | -0.048          | -0.008          | 0.040           | 0.020           | 0.107           | 0.087           | -0.091          | -0.037          | 0.054           | -0.046          | -0.127          | -0.081          | 1.0000 |
| M = 1.303      α = 07.81 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.365                    | 0.005           | 0.370           | -0.184          | -0.179          | 0.004           | 0.004           | -0.328          | -0.332          | 0.047           | -0.491          | -0.538          | 0.050           | -0.462          | -0.512          | 0.0000 |
| 0.0250                   | -0.347                    | -0.029          | 0.319           | -0.235          | -0.173          | 0.062           | -0.106          | -0.316          | -0.210          | -0.045          | -0.450          | -0.405          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.332                    | -0.062          | 0.271           | -0.265          | -0.176          | 0.088           | -0.173          | -0.304          | -0.131          | -0.108          | -0.425          | -0.316          | -0.070          | -0.453          | -0.382          | 0.0500 |
| 0.1000                   | -0.312                    | -0.127          | 0.185           | -0.263          | -0.213          | 0.050           | -0.179          | -0.281          | -0.101          | -0.147          | -0.419          | -0.272          | -0.137          | -0.447          | -0.310          | 0.1000 |
| 0.1500                   | -0.300                    | -0.125          | 0.175           | -0.271          | -0.219          | 0.052           | -0.197          | -0.274          | -0.077          | -0.168          | -0.396          | -0.228          | -0.150          | -0.446          | -0.295          | 0.1500 |
| 0.2000                   | -0.293                    | -0.126          | 0.167           | -0.276          | -0.212          | 0.064           | -0.208          | -0.276          | -0.069          | -0.182          | -0.280          | -0.098          | -0.159          | -0.442          | -0.283          | 0.2000 |
| 0.3000                   | -0.290                    | -0.191          | 0.099           | -0.278          | -0.223          | 0.055           | -0.223          | -0.269          | -0.045          | -0.191          | -0.276          | -0.084          | -0.175          | -0.364          | -0.189          | 0.3000 |
| 0.4000                   | -0.280                    | -0.197          | 0.082           | -0.274          | -0.258          | 0.016           | -0.235          | -0.280          | -0.045          | -0.212          | -0.307          | -0.094          | -0.195          | -0.328          | -0.133          | 0.4000 |
| 0.5000                   | -0.276                    | -0.228          | 0.049           | -0.267          | -0.276          | -0.009          | -0.244          | -0.272          | -0.028          | -0.228          | -0.286          | -0.057          | -0.212          | -0.259          | -0.047          | 0.5000 |
| 0.6000                   | -0.271                    | -0.226          | 0.045           | -0.261          | -0.262          | -0.002          | -0.248          | -0.248          | 0.001           | -0.239          | -0.258          | -0.019          | -0.201          | -0.212          | -0.012          | 0.6000 |
| 0.7000                   | -0.254                    | -0.247          | 0.006           | -0.252          | -0.230          | 0.022           | -0.184          |                 |                 | -0.232          | -0.162          | 0.070           | -0.157          | -0.144          | 0.013           | 0.7000 |
| 0.8000                   | -0.116                    | -0.080          | 0.036           | -0.185          | -0.103          | 0.082           | -0.218          | -0.120          | 0.098           | -0.193          | -0.118          | 0.076           |                 |                 |                 | 0.8000 |
| 1.0000                   | 0.519                     | 0.820           | 0.301           | 0.125           | 0.436           | 0.310           | -0.136          | 0.008           | 0.144           | -0.022          | -0.185          | -0.163          | 0.167           | 0.190           | 0.023           | 1.0000 |
| M = 1.300      α = 11.89 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.434                    | 0.258           | 0.692           | -0.032          | -0.221          | -0.189          | -0.065          | -0.366          | -0.302          | -0.028          | -0.510          | -0.483          | -0.018          | -0.521          | -0.503          | 0.0000 |
| 0.0250                   | -0.464                    | 0.158           | 0.622           | -0.173          | -0.216          | -0.148          | -0.042          | -0.351          | -0.203          | -0.115          | -0.479          | -0.364          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.500                    | 0.071           | 0.571           | -0.267          | -0.211          | 0.056           | -0.205          | -0.337          | -0.132          | -0.177          | -0.461          | -0.284          | -0.138          | -0.519          | -0.381          | 0.0500 |
| 0.1000                   | -0.588                    | -0.060          | 0.528           | -0.314          | -0.208          | 0.107           | -0.244          | -0.312          | -0.069          | -0.225          | -0.461          | -0.236          | -0.205          | -0.518          | -0.313          | 0.1000 |
| 0.1500                   | -0.602                    | -0.105          | 0.497           | -0.352          | -0.230          | 0.122           | -0.276          | -0.300          | -0.024          | -0.257          | -0.376          | -0.119          | -0.220          | -0.520          | -0.300          | 0.1500 |
| 0.2000                   | -0.607                    | -0.134          | 0.473           | -0.380          | -0.255          | 0.125           | -0.309          | -0.303          | 0.006           | -0.274          | -0.339          | -0.065          | -0.232          | -0.504          | -0.272          | 0.2000 |
| 0.3000                   | -0.543                    | -0.197          | 0.346           | -0.416          | -0.262          | 0.154           | -0.332          | -0.312          | 0.019           | -0.292          | -0.354          | -0.062          | -0.219          | -0.392          | -0.173          | 0.3000 |
| 0.4000                   | -0.494                    | -0.228          | 0.266           | -0.440          | -0.281          | 0.159           | -0.358          | -0.318          | 0.040           | -0.316          | -0.359          | -0.043          | -0.211          | -0.348          | -0.137          | 0.4000 |
| 0.5000                   | -0.442                    | -0.267          | 0.175           | -0.441          | -0.293          | 0.148           | -0.380          | -0.320          | 0.060           | -0.330          | -0.341          | -0.011          | -0.216          | -0.285          | -0.069          | 0.5000 |
| 0.6000                   | -0.366                    | -0.283          | 0.084           | -0.380          | -0.295          | 0.085           | -0.384          | -0.305          | 0.079           | -0.299          | -0.295          | 0.004           | -0.166          | -0.204          | -0.037          | 0.6000 |
| 0.7000                   | -0.308                    | -0.280          | 0.028           | -0.322          | -0.270          | 0.052           | -0.282          | -0.102          | 0.075           | -0.096          | -0.170          |                 | -0.034          | -0.071          | -0.037          | 0.7000 |
| 0.8000                   | -0.225                    | -0.117          | 0.108           | -0.143          | -0.185          | -0.042          | -0.050          | -0.152          | -0.312          | 0.930           | 0.063           | -0.866          | 0.862           | 0.636           | -0.227          | 0.8000 |
| 1.0000                   | 0.016                     | 0.692           | 0.675           | 0.574           | 0.162           | -0.412          | 0.744           | 0.432           |                 |                 |                 |                 |                 |                 |                 | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

| x/c                      | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>P</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>P</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>P</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>P</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>P</sub> |        |
| M = 1.299      α = 15.72 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.568          | -0.156          | 0.411           | -0.530          | -0.230          | 0.300           | 0.062           | -0.394          | -0.456          | 0.051           | -0.574          | -0.625          | 0.024           | -0.576          | -0.601          | 0.0000 |
| 0.0250                   | -0.565          | -0.093          | 0.472           | -0.564          | -0.195          | 0.370           | -0.074          | -0.405          | -0.330          | -0.029          | -0.561          | -0.533          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.564          | -0.045          | 0.519           | -0.582          | -0.187          | 0.394           | -0.168          | -0.400          | -0.232          | -0.088          | -0.557          | -0.469          | -0.082          | -0.574          | -0.492          | 0.0500 |
| 0.1000                   | -0.566          | 0.004           | 0.570           | -0.566          | -0.256          | 0.309           | -0.226          | -0.341          | -0.114          | -0.147          | -0.571          | -0.424          | -0.145          | -0.574          | -0.429          | 0.1000 |
| 0.1500                   | -0.566          | 0.008           | 0.574           | -0.563          | -0.285          | 0.277           | -0.247          | -0.314          | -0.067          | -0.182          | -0.551          | -0.369          | -0.165          | -0.576          | -0.411          | 0.1500 |
| 0.2000                   | -0.575          | 0.006           | 0.581           | -0.567          | -0.317          | 0.251           | -0.281          | -0.311          | -0.030          | -0.205          | -0.406          | -0.201          | -0.185          | -0.576          | -0.391          | 0.2000 |
| 0.3000                   | -0.575          | -0.061          | 0.514           | -0.581          | -0.360          | 0.222           | -0.324          | -0.317          | 0.007           | -0.236          | -0.362          | -0.126          | -0.207          | -0.519          | -0.312          | 0.3000 |
| 0.4000                   | -0.573          | -0.133          | 0.440           | -0.578          | -0.388          | 0.190           | -0.377          | -0.344          | 0.033           | -0.275          | -0.361          | -0.086          | -0.217          | -0.432          | -0.214          | 0.4000 |
| 0.5000                   | -0.569          | -0.213          | 0.356           | -0.572          | -0.376          | 0.196           | -0.410          | -0.338          | 0.071           | -0.292          | -0.313          | -0.021          | -0.188          | -0.278          | -0.090          | 0.5000 |
| 0.6000                   | -0.566          | -0.232          | 0.333           | -0.553          | -0.334          | 0.219           | -0.413          | -0.297          | 0.116           | -0.275          | -0.194          | 0.081           | -0.123          | -0.172          | -0.050          | 0.6000 |
| 0.7000                   | -0.542          | -0.248          | 0.294           | -0.532          | -0.292          | 0.240           |                 | -0.174          |                 | -0.195          | -0.171          | 0.025           | 0.050           | -0.107          | -0.157          | 0.7000 |
| 0.8000                   | -0.436          | -0.085          | 0.351           | -0.296          | -0.081          | 0.215           | -0.165          | -0.172          | -0.007          | 0.008           | -0.174          | -0.182          |                 |                 |                 | 0.8000 |
| 1.0000                   | 0.026           | 0.778           | 0.752           | 0.818           | 0.843           | 0.025           | 0.425           | -0.532          | -0.956          | 0.784           | -0.264          | -1.048          | 1.210           | -0.151          | -1.361          | 1.0000 |
| M = 1.503      α = 03.78 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.055          | -0.132          | -0.077          | 0.082           | -0.183          | -0.265          | 0.120           | -0.130          | -0.250          | 0.113           | -0.214          | -0.328          | 0.071           | -0.317          | -0.388          | 0.0000 |
| 0.0250                   | -0.055          | -0.115          | -0.061          | 0.009           | -0.204          | -0.213          | 0.047           | -0.215          | -0.261          | 0.025           | -0.249          | -0.274          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.061          | -0.105          | -0.045          | -0.039          | -0.211          | -0.172          | -0.004          | -0.259          | -0.255          | -0.034          | -0.265          | -0.231          | -0.037          | -0.293          | -0.256          | 0.0500 |
| 0.1000                   | -0.091          | -0.107          | -0.016          | -0.057          | -0.183          | -0.126          | -0.037          | -0.225          | -0.188          | -0.069          | -0.245          | -0.176          | -0.094          | -0.275          | -0.181          | 0.1000 |
| 0.1500                   | -0.107          | -0.111          | -0.004          | -0.078          | -0.163          | -0.085          | -0.061          | -0.201          | -0.140          | -0.091          | -0.228          |                 | -0.137          | -0.100          | -0.263          | 0.1500 |
| 0.2000                   | -0.107          | -0.113          | 0.006           | -0.086          | -0.158          | -0.072          | -0.083          | -0.188          | -0.106          | -0.105          | -0.224          | -0.119          | -0.106          | -0.247          | -0.141          | 0.2000 |
| 0.3000                   | -0.118          | -0.141          | -0.023          | -0.099          | -0.162          | -0.064          | -0.104          | -0.177          | -0.073          | -0.113          | -0.224          | -0.112          | -0.112          | -0.227          | -0.115          | 0.3000 |
| 0.4000                   | -0.123          | -0.158          | -0.035          | -0.109          | -0.158          | -0.049          | -0.120          | -0.204          | -0.084          | -0.128          | -0.212          | -0.084          | -0.126          | -0.215          | -0.088          | 0.4000 |
| 0.5000                   | -0.125          | -0.182          | -0.057          | -0.121          | -0.195          | -0.074          | -0.133          | -0.197          | -0.063          | -0.142          | -0.206          | -0.064          | -0.140          | -0.157          | -0.017          | 0.5000 |
| 0.6000                   | -0.128          | -0.184          | -0.057          | -0.128          | -0.194          | -0.066          | -0.141          | -0.190          | -0.048          | -0.148          | -0.209          | -0.061          | -0.149          | -0.162          | -0.013          | 0.6000 |
| 0.7000                   | -0.134          | -0.189          | -0.055          | -0.154          | -0.180          | -0.026          |                 | -0.202          |                 | -0.145          | -0.212          | -0.066          | -0.150          | -0.169          | -0.018          | 0.7000 |
| 0.8000                   | -0.134          | -0.128          | 0.005           | -0.149          | -0.144          | 0.004           | -0.145          | -0.205          | -0.060          | -0.143          | -0.222          | -0.079          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.111          | 0.192           | 0.303           | -0.041          | -0.008          | 0.033           | -0.132          | -0.182          | -0.050          | -0.138          | -0.266          | -0.128          | -0.116          | -0.203          | -0.087          | 1.0000 |
| M = 1.703      α = 03.73 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.062          | -0.068          | -0.006          | 0.075           | -0.141          | -0.216          | 0.085           | -0.054          | -0.139          | 0.106           | -0.102          | -0.207          | 0.085           | -0.205          | -0.290          | 0.0000 |
| 0.0250                   | -0.065          | -0.078          | -0.013          | 0.001           | -0.157          | -0.158          | 0.039           | -0.128          | -0.167          | 0.028           | -0.146          | -0.173          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.071          | -0.085          | -0.014          | -0.048          | -0.165          | -0.117          | 0.003           | -0.173          | -0.176          | -0.026          | -0.174          | -0.149          | -0.020          | -0.190          | -0.170          | 0.0500 |
| 0.1000                   | -0.095          | -0.095          | 0.000           | -0.070          | -0.157          | -0.087          | -0.039          | -0.177          | -0.137          | -0.057          | -0.184          | -0.127          | -0.077          | -0.182          | -0.105          | 0.1000 |
| 0.1500                   | -0.107          | -0.095          | 0.012           | -0.078          | -0.136          | -0.057          | -0.068          | -0.161          | -0.093          | -0.076          | -0.184          | -0.107          | -0.085          | -0.180          | -0.095          | 0.1500 |
| 0.2000                   | -0.108          | -0.096          | 0.011           | -0.092          | -0.129          | -0.037          | -0.087          | -0.153          | -0.066          | -0.090          | -0.181          | -0.092          | -0.092          | -0.179          | -0.087          | 0.2000 |
| 0.3000                   | -0.112          | -0.109          | 0.012           | -0.097          | -0.127          | -0.030          | -0.095          | -0.156          | -0.061          | -0.100          | -0.170          | -0.070          | -0.101          | -0.180          | -0.079          | 0.3000 |
| 0.4000                   | -0.120          | -0.121          | -0.002          | -0.111          | -0.135          | -0.024          | -0.113          | -0.154          | -0.041          | -0.111          | -0.164          | -0.053          | -0.110          | -0.181          | -0.072          | 0.4000 |
| 0.5000                   | -0.122          | -0.140          | -0.018          | -0.117          | -0.147          | -0.030          | -0.121          | -0.148          | -0.027          | -0.119          | -0.168          | -0.048          | -0.117          | -0.129          | -0.012          | 0.5000 |
| 0.6000                   | -0.135          | -0.142          | -0.006          | -0.113          | -0.143          | -0.030          | -0.124          | -0.161          | -0.037          | -0.126          | -0.176          | -0.050          | -0.124          | -0.135          | -0.011          | 0.6000 |
| 0.7000                   | -0.133          | -0.151          | -0.018          | -0.132          | -0.159          | -0.027          |                 | -0.174          |                 | -0.128          | -0.180          | -0.052          | -0.126          | -0.141          | -0.015          | 0.7000 |
| 0.8000                   | -0.127          | -0.137          | -0.010          | -0.133          | -0.162          | -0.028          | -0.126          | -0.179          | -0.052          | -0.123          | -0.185          | -0.062          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.101          | -0.039          | 0.062           | -0.080          | -0.127          | -0.047          | -0.126          | -0.161          | -0.035          | -0.094          | -0.197          | -0.103          | -0.106          | -0.164          | -0.058          | 1.0000 |
| M = 1.909      α = 03.93 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.012          | -0.029          | -0.016          | 0.063           | -0.094          | -0.157          | 0.151           | -0.001          | -0.152          | 0.137           | -0.030          | -0.167          | 0.122           | -0.121          | -0.242          | 0.0000 |
| 0.0250                   | -0.029          | -0.053          | -0.024          | 0.034           | -0.110          | -0.144          | 0.077           | -0.072          | -0.149          | 0.064           | -0.077          | -0.141          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.044          | -0.071          | -0.027          | 0.007           | -0.121          | -0.128          | 0.025           | -0.118          | -0.142          | 0.014           | -0.107          | -0.121          | 0.023           | -0.112          | -0.135          | 0.0500 |
| 0.1000                   | -0.070          | -0.083          | -0.013          | -0.040          | -0.126          | -0.086          | -0.016          | -0.137          | -0.121          | -0.018          | -0.119          | -0.101          | -0.030          | -0.109          | -0.079          | 0.1000 |
| 0.1500                   | -0.085          | -0.088          | -0.003          | -0.057          | -0.118          | -0.061          | -0.037          | -0.137          | -0.100          | -0.037          | -0.124          | -0.088          | -0.038          | -0.110          | -0.072          | 0.1500 |
| 0.2000                   | -0.090          | -0.088          | 0.001           | -0.068          | -0.116          | -0.048          | -0.053          | -0.132          | -0.079          | -0.052          | -0.132          | -0.079          | -0.045          | -0.113          | -0.068          | 0.2000 |
| 0.3000                   | -0.094          | -0.087          | 0.008           | -0.085          | -0.108          | -0.023          | -0.067          | -0.124          | -0.057          | -0.062          | -0.139          | -0.077          | -0.056          | -0.122          | -0.067          | 0.3000 |
| 0.4000                   | -0.099          | -0.089          | 0.010           | -0.091          | -0.107          | -0.017          | -0.081          | -0.122          | -0.040          | -0.077          | -0.137          | -0.060          | -0.068          | -0.133          | -0.065          | 0.4000 |
| 0.5000                   | -0.103          | -0.096          | 0.007           | -0.098          | -0.109          | -0.012          | -0.093          | -0.120          | -0.027          | -0.089          | -0.135          | -0.046          | -0.078          | -0.084          | -0.006          | 0.5000 |
| 0.6000                   | -0.108          | -0.105          | 0.003           | -0.078          | -0.112          | -0.034          | -0.097          | -0.122          | -0.026          | -0.097          | -0.127          | -0.030          | -0.087          | -0.084          | 0.003           | 0.6000 |
| 0.7000                   | -0.112          | -0.108          | 0.004           | -0.106          | -0.120          | -0.014          | -0.122          |                 |                 | -0.099          | -0.130          | -0.031          | -0.090          | -0.072          | 0.017           | 0.7000 |
| 0.8000                   | -0.109          | -0.116          | -0.007          | -0.105          | -0.122          | -0.017          | -0.096          | -0.132          | -0.036          | -0.096          | -0.136          | -0.041          |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.082          | -0.150          | -0.068          | -0.020          | -0.112          | -0.091          | -0.084          | -0.177          | -0.093          | -0.073          | -0.159          | -0.087          | -0.063          | 0.033           | 0.097           | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$  - Continued

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| x/c                       | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 2.235      α = -03.73 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.121           | 0.138           | 0.017           | 0.212           | 0.122           | -0.090          | 0.276           | 0.234           | -0.042          | 0.201           | 0.186           | -0.015          | 0.210           | 0.069           | -0.141          | 0.0000 |
| 0.0250                    | 0.083           | 0.097           | 0.014           | 0.114           | 0.080           | -0.034          | 0.137           | 0.140           | 0.003           | 0.122           | 0.122           |                 |                 |                 |                 | 0.0250 |
| 0.0500                    | 0.052           | 0.064           | 0.012           | 0.050           | 0.049           | -0.001          | 0.052           | 0.077           | 0.025           | 0.068           | 0.078           | 0.010           | 0.095           | 0.065           | -0.030          | 0.0500 |
| 0.1000                    | 0.005           | 0.017           | -0.012          | 0.022           | 0.023           | 0.001           | 0.041           | 0.040           | -0.001          | 0.035           | 0.052           | 0.016           | 0.032           | 0.059           | 0.027           | 0.1000 |
| 0.1500                    | 0.004           | 0.001           | -0.003          | 0.005           | 0.012           | 0.007           | 0.022           | 0.025           | 0.003           | 0.019           | 0.040           | 0.021           | 0.021           | 0.051           | 0.030           | 0.1500 |
| 0.2000                    | 0.000           | -0.004          | -0.004          | -0.008          | -0.002          | 0.007           | 0.011           | 0.012           | 0.005           | 0.028           | 0.023           | 0.012           | 0.040           | 0.028           | 0.028           | 0.2000 |
| 0.3000                    | -0.007          | -0.007          | 0.000           | -0.017          | -0.009          | 0.008           | -0.016          | -0.006          | 0.010           | -0.005          | 0.008           | 0.014           | 0.002           | 0.010           | 0.017           | 0.3000 |
| 0.4000                    | -0.018          | -0.008          | 0.009           | -0.023          | -0.019          | 0.004           | -0.025          | -0.017          | 0.009           | -0.019          | -0.010          | 0.009           | -0.007          | 0.002           | 0.009           | 0.4000 |
| 0.5000                    | -0.023          | -0.012          | 0.011           | -0.026          | -0.019          | 0.007           | -0.034          | -0.022          | 0.012           | -0.030          | -0.019          | 0.010           | -0.017          | -0.034          | -0.017          | 0.5000 |
| 0.6000                    | -0.027          | -0.016          | 0.011           | 0.003           | -0.018          | -0.021          | -0.038          | -0.025          | 0.014           | -0.037          | -0.023          | 0.014           | -0.026          | -0.040          | -0.014          | 0.6000 |
| 0.7000                    | -0.029          | -0.026          | 0.003           | -0.035          | -0.021          | 0.014           | -0.039          | -0.029          |                 | -0.039          | -0.035          | 0.004           | -0.029          | -0.045          | -0.016          | 0.7000 |
| 0.8000                    | -0.034          | -0.028          | 0.007           | -0.034          | -0.031          | 0.003           | -0.036          | -0.039          | -0.003          | -0.035          | -0.047          | -0.012          |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.055          | -0.004          | 0.051           | 0.080           | -0.074          | -0.154          | -0.019          | -0.076          | -0.057          | -0.012          | -0.076          | -0.063          | -0.011          | -0.054          | -0.043          | 1.0000 |
| M = 2.230      α = 00.20  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.127           | 0.026           | -0.101          | 0.206           | 0.047           | -0.158          | 0.221           | 0.117           | -0.104          | 0.172           | 0.104           | -0.068          | 0.181           | 0.005           | -0.177          | 0.0000 |
| 0.0250                    | 0.077           | 0.009           | -0.068          | 0.103           | 0.007           | -0.096          | 0.115           | 0.047           | -0.068          | 0.101           | 0.047           | -0.054          |                 |                 |                 | 0.0250 |
| 0.0500                    | 0.038           | -0.011          | -0.049          | 0.038           | -0.021          | -0.059          | 0.046           | -0.047          |                 | 0.052           | 0.008           | -0.044          | 0.067           | 0.001           | -0.066          | 0.0500 |
| 0.1000                    | -0.009          | -0.064          | -0.055          | 0.018           | -0.043          | -0.061          | 0.020           | -0.027          | -0.047          | 0.020           | -0.015          | -0.034          | 0.007           | -0.003          | -0.010          | 0.1000 |
| 0.1500                    | -0.024          | -0.069          | -0.045          | -0.004          | -0.059          | -0.055          | 0.008           | -0.039          | -0.048          | 0.003           | -0.025          | -0.028          | 0.001           | -0.010          | -0.011          | 0.1500 |
| 0.2000                    | -0.028          | -0.065          | -0.038          | -0.020          | -0.069          | -0.049          | -0.013          | -0.050          | -0.037          | -0.011          | -0.034          | -0.023          | -0.007          | -0.018          | -0.011          | 0.2000 |
| 0.3000                    | -0.038          | -0.068          | -0.029          | -0.034          | -0.073          | -0.039          | -0.031          | -0.063          | -0.033          | -0.023          | -0.049          | -0.026          | -0.018          | -0.035          | -0.017          | 0.3000 |
| 0.4000                    | -0.048          | -0.067          | -0.019          | -0.046          | -0.076          | -0.030          | -0.044          | -0.073          | -0.029          | -0.035          | -0.062          | -0.027          | -0.027          | -0.046          | -0.019          | 0.4000 |
| 0.5000                    | -0.052          | -0.066          | -0.014          | -0.053          | -0.079          | -0.026          | -0.055          | -0.074          | -0.019          | -0.047          | -0.068          | -0.021          | -0.036          | -0.077          | -0.041          | 0.5000 |
| 0.6000                    | -0.056          | -0.071          | -0.015          | -0.023          | -0.073          | -0.051          | -0.059          | -0.073          | -0.014          | -0.054          | -0.069          | -0.015          | -0.044          | -0.082          | -0.038          | 0.6000 |
| 0.7000                    | -0.064          | -0.072          | -0.009          | -0.052          | -0.073          | -0.020          | -0.076          |                 |                 | -0.057          | -0.079          | -0.022          | -0.049          | -0.085          | -0.036          | 0.7000 |
| 0.8000                    | -0.062          | -0.071          | -0.009          | -0.062          | -0.074          | -0.012          | -0.061          | -0.083          | -0.022          | -0.057          | -0.089          | -0.032          |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.026          | -0.058          | -0.032          | -0.021          | -0.084          | -0.063          | -0.055          | -0.110          | -0.055          | -0.043          | -0.107          | -0.065          | -0.050          | -0.080          | -0.029          | 1.0000 |
| M = 2.231      α = 04.18  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.055           | -0.010          | -0.065          | 0.157           | -0.042          | -0.199          | 0.206           | 0.016           | -0.190          | 0.152           | -0.001          | -0.153          | 0.143           | -0.062          | -0.205          | 0.0000 |
| 0.0250                    | 0.014           | -0.032          | -0.046          | 0.065           | -0.069          | -0.134          | 0.097           | -0.042          | -0.140          | 0.087           | -0.041          | -0.127          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.018          | -0.052          | -0.034          | 0.003           | -0.088          | -0.092          | 0.027           | -0.081          | -0.108          | 0.041           | -0.068          | -0.109          | 0.052           | -0.067          | -0.119          | 0.0500 |
| 0.1000                    | -0.055          | -0.085          | -0.030          | -0.026          | -0.102          | -0.076          | 0.002           | -0.099          | -0.101          | 0.009           | -0.083          | -0.092          | 0.001           | -0.070          | -0.072          | 0.1000 |
| 0.1500                    | -0.070          | -0.089          | -0.019          | -0.040          | -0.106          | -0.066          | -0.015          | -0.104          | -0.089          | -0.009          | -0.091          | -0.082          | -0.008          | -0.071          | -0.063          | 0.1500 |
| 0.2000                    | -0.073          | -0.089          | -0.016          | -0.055          | -0.109          | -0.053          | -0.036          | -0.109          | -0.073          | -0.025          | -0.096          | -0.070          | -0.017          | -0.076          | -0.059          | 0.2000 |
| 0.3000                    | -0.078          | -0.093          | -0.015          | -0.072          | -0.111          | -0.039          | -0.050          | -0.115          | -0.065          | -0.037          | -0.104          | -0.068          | -0.030          | -0.089          | -0.059          | 0.3000 |
| 0.4000                    | -0.085          | -0.091          | -0.005          | -0.074          | -0.108          | -0.034          | -0.062          | -0.115          | -0.053          | -0.051          | -0.112          | -0.062          | -0.041          | -0.098          | -0.056          | 0.4000 |
| 0.5000                    | -0.090          | -0.090          | 0.000           | -0.082          | -0.105          | -0.023          | -0.075          | -0.111          | -0.037          | -0.063          | -0.115          | -0.052          | -0.050          | -0.122          | -0.072          | 0.5000 |
| 0.6000                    | -0.091          | -0.093          | -0.002          | -0.041          | -0.102          | -0.061          | -0.079          | -0.109          | -0.030          | -0.071          | -0.112          | -0.040          | -0.059          | -0.124          | -0.065          | 0.6000 |
| 0.7000                    | -0.096          | -0.097          | -0.002          | -0.093          | -0.099          | -0.006          | -0.107          | -0.107          |                 | -0.076          | -0.119          | -0.043          | -0.065          | -0.124          | -0.058          | 0.7000 |
| 0.8000                    | -0.093          | -0.091          | 0.002           | -0.088          | -0.104          | -0.016          | -0.082          | -0.110          | -0.028          | -0.075          | -0.122          | -0.047          |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.066          | -0.049          | 0.017           | 0.091           | -0.136          | -0.227          | -0.080          | -0.129          | -0.049          | -0.060          | -0.118          | -0.058          | -0.067          | -0.103          | -0.036          | 1.0000 |
| M = 2.236      α = 08.26  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.044           | -0.121          | -0.164          | 0.123           | -0.107          | -0.229          | 0.137           | -0.054          | -0.190          | 0.109           | -0.094          | -0.203          | 0.115           | -0.133          | -0.248          | 0.0000 |
| 0.0250                    | 0.009           | -0.111          | -0.121          | 0.037           | -0.121          | -0.158          | 0.049           | -0.097          | -0.147          | 0.052           | -0.118          | -0.170          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.025          | -0.106          | -0.081          | -0.020          | -0.129          | -0.110          | -0.006          | -0.126          | -0.119          | 0.012           | -0.134          | -0.146          | 0.033           | -0.133          | -0.166          | 0.0500 |
| 0.1000                    | -0.090          | -0.103          | -0.013          | -0.048          | -0.130          | -0.082          | -0.023          | -0.138          | -0.115          | -0.016          | -0.139          | -0.123          | -0.013          | -0.133          | -0.121          | 0.1000 |
| 0.1500                    | -0.100          | -0.094          | 0.006           | -0.067          | -0.124          | -0.057          | -0.043          | -0.140          | -0.097          | -0.034          | -0.142          | -0.107          | -0.023          | -0.134          | -0.111          | 0.1500 |
| 0.2000                    | -0.116          | -0.100          | 0.016           | -0.078          | -0.122          | -0.044          | -0.055          | -0.140          | -0.085          | -0.047          | -0.145          | -0.097          | -0.033          | -0.136          | -0.103          | 0.2000 |
| 0.3000                    | -0.131          | -0.114          | 0.017           | -0.101          | -0.122          | -0.021          | -0.076          | -0.138          | -0.062          | -0.059          | -0.146          | -0.086          | -0.046          | -0.140          | -0.094          | 0.3000 |
| 0.4000                    | -0.131          | -0.117          | 0.014           | -0.107          | -0.122          | -0.014          | -0.089          | -0.138          | -0.049          | -0.072          | -0.146          | -0.074          | -0.059          | -0.142          | -0.084          | 0.4000 |
| 0.5000                    | -0.130          | -0.119          | 0.011           | -0.114          | -0.121          | -0.007          | -0.104          | -0.137          | -0.033          | -0.086          | -0.144          | -0.058          | -0.068          | -0.137          | -0.069          | 0.5000 |
| 0.6000                    | -0.130          | -0.123          | 0.007           | -0.064          | -0.122          | -0.059          | -0.109          | -0.135          | -0.026          | -0.094          | -0.137          | -0.044          | -0.077          | -0.135          | -0.058          | 0.6000 |
| 0.7000                    | -0.130          | -0.129          | 0.001           | -0.122          | -0.124          | -0.002          | -0.134          |                 |                 | -0.098          | -0.142          | -0.043          | -0.083          | -0.132          | -0.049          | 0.7000 |
| 0.8000                    | -0.129          | -0.125          | 0.004           | -0.121          | -0.128          | -0.007          | -0.117          | -0.136          | -0.019          | -0.100          | -0.142          | -0.041          |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.125          | -0.087          | 0.038           | 0.054           | -0.144          | -0.199          | -0.122          | -0.145          | -0.023          | -0.096          | -0.129          | -0.033          | -0.076          | -0.109          | -0.033          | 1.0000 |



TABLE IV.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Concluded  
(c) BVWC;  $\delta = 10.2^\circ$  - Concluded

| x/c                      | y/b=0.150                |                 |        | y/b=0.300       |                 |        | y/b=0.450       |                 |        | y/b=0.600       |                 |        | y/b=0.750       |                 |        | x/c    |
|--------------------------|--------------------------|-----------------|--------|-----------------|-----------------|--------|-----------------|-----------------|--------|-----------------|-----------------|--------|-----------------|-----------------|--------|--------|
|                          | Cp <sub>L</sub>          | Cp <sub>R</sub> | ΔCp    | Cp <sub>L</sub> | Cp <sub>R</sub> | ΔCp    | Cp <sub>L</sub> | Cp <sub>R</sub> | ΔCp    | Cp <sub>L</sub> | Cp <sub>R</sub> | ΔCp    | Cp <sub>L</sub> | Cp <sub>R</sub> | ΔCp    |        |
|                          | M = 2.232      α = 12.24 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
| 0.0000                   | -0.123                   | -0.139          | -0.016 | 0.032           | -0.165          | -0.197 | 0.082           | -0.130          | -0.212 | 0.072           | -0.147          | -0.219 | 0.072           | -0.178          | -0.250 | 0.0000 |
| 0.0250                   | -0.126                   | -0.143          | -0.017 | -0.025          | -0.175          | -0.150 | 0.012           | -0.150          | -0.162 | 0.026           | -0.160          | -0.186 |                 | -0.174          | -0.176 | 0.0250 |
| 0.0500                   | -0.132                   | -0.148          | -0.016 | -0.064          | -0.180          | -0.116 | -0.033          | -0.161          | -0.128 | -0.009          | -0.167          | -0.159 | 0.003           | -0.171          | -0.134 | 0.0500 |
| 0.1000                   | -0.150                   | -0.161          | -0.010 | -0.089          | -0.176          | -0.087 | -0.050          | -0.154          | -0.104 | -0.038          | -0.165          | -0.127 | -0.037          | -0.170          | -0.124 | 0.1000 |
| 0.1500                   | -0.158                   | -0.164          | -0.006 | -0.099          | -0.162          | -0.063 | -0.067          | -0.153          | -0.086 | -0.057          | -0.162          | -0.105 | -0.046          | -0.170          | -0.114 | 0.1500 |
| 0.2000                   | -0.160                   | -0.166          | -0.006 | -0.112          | -0.136          | -0.024 | -0.083          | -0.154          | -0.071 | -0.070          | -0.161          | -0.091 | -0.056          | -0.170          | -0.114 | 0.2000 |
| 0.3000                   | -0.162                   | -0.163          | -0.001 | -0.127          | -0.128          | -0.001 | -0.096          | -0.152          | -0.057 | -0.082          | -0.161          | -0.079 | -0.069          | -0.169          | -0.099 | 0.3000 |
| 0.4000                   | -0.168                   | -0.152          | 0.017  | -0.132          | -0.152          | -0.020 | -0.112          | -0.150          | -0.039 | -0.094          | -0.164          | -0.070 | -0.080          | -0.169          | -0.089 | 0.4000 |
| 0.5000                   | -0.166                   | -0.149          | 0.017  | -0.138          | -0.159          | -0.021 | -0.122          | -0.151          | -0.029 | -0.105          | -0.164          | -0.059 | -0.088          | -0.159          | -0.071 | 0.5000 |
| 0.6000                   | -0.160                   | -0.152          | 0.008  | -0.076          | -0.160          | -0.084 | -0.129          | -0.154          | -0.025 | -0.114          | -0.159          | -0.045 | -0.096          | -0.154          | -0.059 | 0.6000 |
| 0.7000                   | -0.163                   | -0.156          | 0.006  | -0.157          | -0.157          | 0.000  |                 | -0.151          |        | -0.117          | -0.161          | -0.043 | -0.102          | -0.148          | -0.046 | 0.7000 |
| 0.8000                   | -0.155                   | -0.138          | 0.017  | -0.149          | -0.136          | 0.014  | -0.136          | -0.133          | 0.002  | -0.120          | -0.153          | -0.034 |                 |                 |        | 0.8000 |
| 1.0000                   | -0.110                   | -0.035          | 0.075  | 0.133           | -0.041          | -0.174 | -0.131          | -0.057          | 0.074  | -0.121          | -0.112          | 0.009  | -0.112          | -0.118          | -0.006 | 1.0000 |
| M = 2.232      α = 16.26 |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
| 0.0000                   | -0.190                   | -0.151          | 0.039  | -0.021          | -0.156          | -0.134 | -0.011          | -0.147          | -0.136 | -0.036          | -0.193          | -0.158 | 0.000           | -0.187          | -0.188 | 0.0000 |
| 0.0250                   | -0.190                   | -0.141          | 0.048  | -0.066          | -0.181          | -0.115 | -0.059          | -0.179          | -0.121 | -0.056          | -0.197          | -0.142 |                 | -0.181          | -0.140 | 0.0250 |
| 0.0500                   | -0.188                   | -0.137          | 0.050  | -0.098          | -0.196          | -0.098 | -0.090          | -0.199          | -0.109 | -0.071          | -0.200          | -0.129 | -0.041          | -0.177          | -0.111 | 0.0500 |
| 0.1000                   | -0.178                   | -0.144          | 0.034  | -0.123          | -0.194          | -0.071 | -0.101          | -0.197          | -0.096 | -0.088          | -0.200          | -0.112 | -0.066          | -0.177          | -0.099 | 0.1000 |
| 0.1500                   | -0.184                   | -0.152          | 0.033  | -0.129          | -0.189          | -0.059 | -0.107          | -0.197          | -0.090 | -0.099          | -0.198          | -0.099 | -0.075          | -0.174          | -0.099 | 0.1500 |
| 0.2000                   | -0.191                   | -0.150          | 0.040  | -0.138          | -0.188          | -0.050 | -0.121          | -0.197          | -0.076 | -0.109          | -0.198          | -0.090 | -0.083          | -0.172          | -0.088 | 0.2000 |
| 0.3000                   | -0.191                   | -0.142          | 0.049  | -0.151          | -0.189          | -0.039 | -0.133          | -0.197          | -0.065 | -0.117          | -0.195          | -0.078 | -0.094          | -0.166          | -0.072 | 0.3000 |
| 0.4000                   | -0.191                   | -0.131          | 0.060  | -0.154          | -0.193          | -0.039 | -0.141          | -0.197          | -0.057 | -0.125          | -0.188          | -0.063 | -0.104          | -0.160          | -0.057 | 0.4000 |
| 0.5000                   | -0.193                   | -0.128          | 0.064  | -0.159          | -0.197          | -0.038 | -0.144          | -0.197          | -0.053 | -0.134          | -0.176          | -0.043 | -0.110          | -0.148          | -0.038 | 0.5000 |
| 0.6000                   | -0.187                   | -0.130          | 0.056  | -0.095          | -0.195          | -0.100 | -0.152          | -0.196          | -0.044 | -0.141          | -0.159          | -0.018 | -0.117          | -0.138          | -0.021 | 0.6000 |
| 0.7000                   | -0.181                   | -0.141          | 0.040  | -0.180          | -0.180          | 0.000  |                 | -0.191          |        | -0.143          | -0.116          | 0.027  | -0.121          | -0.136          | -0.015 | 0.7000 |
| 0.8000                   | -0.144                   | -0.075          | 0.069  | -0.166          | -0.154          | 0.012  | -0.157          | -0.179          | -0.022 | -0.145          | -0.088          | 0.057  |                 |                 |        | 0.8000 |
| 1.0000                   | 0.026                    | 0.285           | 0.259  | 0.158           | -0.070          | -0.229 | -0.150          | -0.138          | 0.012  | -0.146          | -0.075          | 0.071  | -0.118          | -0.179          | -0.060 | 1.0000 |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT  $5.3^\circ$  SIDESLIP  
(a) BVW

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| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 0.700 $\alpha = -0.415$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.128  | 0.076  | 0.040  | 0.012  | 0.008  | -0.006 | -0.017 | 0.004  | 0.089  | 0.048  | -0.026 | -0.055 | -0.070 | -0.040 | -0.024 | 0.025  | 0.0500                |
| 0.1500                       | 0.139  | 0.084  | 0.051  | 0.018  | 0.008  | 0.004  | -0.004 | 0.006  | 0.018  | 0.015  | -0.015 | -0.045 | -0.059 | -0.015 | -0.015 | 0.057  | 0.1500                |
| 0.2500                       | 0.082  | 0.036  | 0.008  | -0.022 | -0.032 | -0.037 | -0.041 | -0.040 | -0.014 | -0.023 | -0.039 | -0.054 | -0.060 | -0.043 | -0.012 | 0.057  | 0.2500                |
| 0.3500                       | 0.018  | -0.023 | -0.046 | -0.069 | -0.077 | -0.073 | -0.079 | -0.067 | -0.024 | -0.033 | -0.043 | -0.048 | -0.044 | -0.019 | 0.001  | 0.058  | 0.3500                |
| 0.4500                       | -0.018 | -0.051 | -0.076 | -0.081 | -0.085 | -0.084 | -0.084 | -0.066 | 0.054  | 0.006  | -0.033 | -0.040 | -0.033 | -0.005 | 0.010  | 0.061  | 0.4500                |
| 0.5500                       | -0.018 | -0.026 | -0.063 | -0.068 | -0.071 | -0.071 | -0.072 | -0.056 | -0.091 | -0.165 | -0.174 | -0.158 | -0.104 | -0.006 | 0.012  | 0.059  | 0.5500                |
| 0.6500                       | -0.018 | -0.041 | -0.055 | -0.067 | -0.068 | -0.069 | -0.072 | -0.068 | -0.092 | -0.149 | -0.176 | -0.172 | -0.124 | -0.044 | -0.006 | 0.046  | 0.6500                |
| 0.7500                       | -0.018 | -0.046 | -0.063 | -0.078 | -0.085 | -0.083 | -0.087 | -0.087 | -0.104 | -0.134 | -0.171 | -0.164 | -0.131 | -0.054 | -0.014 |        | 0.7500                |
| 0.8500                       | 0.003  | -0.032 | -0.055 | -0.078 | -0.083 | -0.087 | -0.095 | -0.097 | -0.118 | -0.166 | -0.196 | -0.184 | -0.141 | -0.061 | -0.032 | 0.044  | 0.8500                |
| 0.9500                       | 0.064  | 0.015  | -0.008 | -0.039 | -0.045 | -0.052 | -0.060 | -0.056 | -0.126 | -0.182 | -0.194 | -0.184 | -0.141 | -0.033 | -0.024 | 0.056  | 0.9500                |
| M = 0.700 $\alpha = -0.05$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.112  | 0.061  | 0.026  | -0.004 | -0.011 | -0.023 | -0.028 | -0.013 | -0.011 | -0.068 | -0.103 | -0.106 | -0.135 | -0.070 | -0.037 | 0.036  | 0.0500                |
| 0.1500                       | 0.071  | 0.027  | -0.004 | -0.034 | -0.039 | -0.044 | -0.052 | -0.044 | -0.048 | -0.081 | -0.105 | -0.114 | -0.132 |        | -0.039 | 0.043  | 0.1500                |
| 0.2500                       | 0.023  | -0.013 | -0.038 | -0.060 | -0.068 | -0.068 | -0.076 | -0.074 | -0.071 | -0.096 | -0.113 | -0.119 | -0.120 | -0.070 | -0.030 | 0.043  | 0.2500                |
| 0.3500                       | -0.003 | -0.033 | -0.052 | -0.071 | -0.077 | -0.071 | -0.076 | -0.068 | -0.066 | -0.091 | -0.112 | -0.112 | -0.099 | -0.043 | -0.012 | 0.044  | 0.3500                |
| 0.4500                       | -0.007 | -0.033 | -0.055 | -0.062 | -0.070 | -0.066 | -0.067 | -0.050 | -0.035 | -0.084 | -0.109 | -0.103 | -0.083 | -0.020 | -0.001 | 0.043  | 0.4500                |
| 0.5500                       | -0.006 | -0.016 | -0.053 | -0.062 | -0.068 | -0.067 | -0.068 | -0.050 | -0.023 | -0.082 | -0.110 | -0.109 | -0.084 | -0.017 | -0.002 | 0.044  | 0.5500                |
| 0.6500                       | -0.004 | -0.032 | -0.052 | -0.068 | -0.073 | -0.072 | -0.074 | -0.065 | -0.046 | -0.082 | -0.109 | -0.110 | -0.095 | -0.036 | -0.006 | 0.044  | 0.6500                |
| 0.7500                       | 0.026  | -0.014 | -0.037 | -0.055 | -0.068 | -0.069 | -0.073 | -0.069 | -0.068 | -0.087 | -0.114 | -0.121 | -0.108 | -0.057 | 0.026  |        | 0.7500                |
| 0.8500                       | 0.071  | 0.024  | -0.001 | -0.030 | -0.040 | -0.045 | -0.054 | -0.047 | -0.056 | -0.086 | -0.115 | -0.121 | -0.106 | -0.059 | -0.037 | 0.041  | 0.8500                |
| 0.9500                       | 0.108  | 0.056  | 0.033  | -0.003 | -0.015 | -0.021 | -0.026 | -0.015 | -0.023 | -0.080 | -0.109 | -0.118 | -0.103 | -0.046 | -0.028 | 0.045  | 0.9500                |
| M = 0.698 $\alpha = 03.91$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.087  | 0.035  | 0.001  | -0.029 | -0.030 | -0.046 | -0.049 | -0.037 | -0.090 | -0.151 | -0.141 | -0.144 | -0.163 | -0.062 | -0.029 | 0.048  | 0.0500                |
| 0.1500                       | 0.021  | -0.013 | -0.043 | -0.069 | -0.068 | -0.073 | -0.080 | -0.082 | -0.102 | -0.156 | -0.175 | -0.160 | -0.173 |        | -0.034 | 0.049  | 0.1500                |
| 0.2500                       | -0.006 | -0.034 | -0.055 | -0.066 | -0.070 | -0.069 | -0.076 | -0.077 | -0.109 | -0.150 | -0.168 | -0.155 | -0.155 | -0.074 | -0.023 | 0.046  | 0.2500                |
| 0.3500                       | -0.006 | -0.029 | -0.044 | -0.056 | -0.059 | -0.054 | -0.058 | -0.056 | -0.080 | -0.129 | -0.155 | -0.151 | -0.136 | -0.055 | -0.016 | 0.043  | 0.3500                |
| 0.4500                       | -0.006 | -0.029 | -0.051 | -0.059 | -0.059 | -0.057 | -0.058 | -0.045 | -0.090 | -0.135 | -0.173 | -0.144 | -0.125 | -0.013 | 0.008  | 0.056  | 0.4500                |
| 0.5500                       | -0.005 | -0.016 | -0.060 | -0.067 | -0.072 | -0.071 | -0.073 | -0.053 | 0.058  | -0.023 | -0.028 | -0.058 | -0.030 | -0.003 | 0.011  | 0.062  | 0.5500                |
| 0.6500                       | 0.028  | -0.012 | -0.035 | -0.052 | -0.063 | -0.065 | -0.067 | -0.056 | -0.014 | -0.008 | -0.027 | -0.044 | -0.044 | -0.017 | 0.011  | 0.063  | 0.6500                |
| 0.7500                       | 0.098  | 0.043  | 0.019  | -0.008 | -0.019 | -0.023 | -0.028 | -0.020 | -0.010 | -0.018 | -0.031 | -0.051 | -0.051 | -0.039 | -0.009 |        | 0.7500                |
| 0.8500                       | 0.155  | 0.093  | 0.064  | 0.029  | 0.016  | 0.011  | 0.006  | 0.013  | 0.029  | 0.009  | -0.026 | -0.044 | -0.046 | -0.030 | -0.016 | 0.057  | 0.8500                |
| 0.9500                       | 0.144  | 0.085  | 0.058  | 0.021  | 0.011  | 0.003  | -0.003 | 0.010  | 0.091  | 0.029  | -0.010 | -0.033 | -0.044 | -0.024 | -0.015 | 0.060  | 0.9500                |
| M = 0.700 $\alpha = 07.96$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.004  | -0.040 | -0.072 | -0.101 | -0.105 | -0.111 | -0.120 | -0.115 | -0.256 | -0.276 | -0.285 | -0.134 | -0.199 | -0.066 | -0.034 | 0.029  | 0.0500                |
| 0.1500                       | -0.065 | -0.088 | -0.118 | -0.132 | -0.127 | -0.127 | -0.135 | -0.142 | -0.249 | -0.282 | -0.283 | -0.235 | -0.212 |        | -0.046 | 0.026  | 0.1500                |
| 0.2500                       | -0.054 | -0.071 | -0.075 | -0.089 | -0.088 | -0.085 | -0.091 | -0.101 | -0.171 | -0.222 | -0.262 | -0.234 | -0.200 | -0.103 | -0.051 | 0.019  | 0.2500                |
| 0.3500                       | -0.041 | -0.047 | -0.059 | -0.075 | -0.073 | -0.065 | -0.071 | -0.076 | -0.134 | -0.213 | -0.250 | -0.216 | -0.183 | -0.069 | -0.041 | 0.032  | 0.3500                |
| 0.4500                       | -0.057 | -0.075 | -0.093 | -0.097 | -0.099 | -0.094 | -0.095 | -0.088 | -0.218 | -0.297 | -0.295 | -0.240 | -0.170 | -0.041 | -0.015 | 0.055  | 0.4500                |
| 0.5500                       | -0.054 | -0.067 | -0.124 | -0.125 | -0.126 | -0.128 | -0.130 | -0.111 | 0.041  | 0.098  | 0.038  | -0.005 | -0.010 | -0.017 | -0.004 | 0.056  | 0.5500                |
| 0.6500                       | 0.031  | -0.016 | -0.044 | -0.068 | -0.078 | -0.082 | -0.083 | -0.069 | 0.017  | 0.018  | 0.029  | 0.007  | -0.004 | -0.013 | 0.005  | 0.058  | 0.6500                |
| 0.7500                       | 0.157  | 0.095  | 0.065  | 0.031  | 0.014  | 0.012  | 0.005  | 0.022  | 0.034  | 0.044  | 0.029  | 0.006  | -0.021 | -0.026 | -0.017 |        | 0.7500                |
| 0.8500                       | 0.202  | 0.139  | 0.110  | 0.069  | 0.053  | 0.046  | 0.036  | 0.053  | 0.088  | 0.087  | 0.051  | 0.027  | -0.008 | -0.021 | -0.016 | 0.055  | 0.8500                |
| 0.9500                       | 0.119  | 0.067  | 0.040  | -0.004 | -0.012 | -0.023 | -0.026 | -0.015 | 0.148  | 0.136  | 0.067  | 0.033  | -0.004 | -0.025 | -0.018 | 0.049  | 0.9500                |
| M = 0.697 $\alpha = 11.96$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.099 | -0.140 | -0.172 | -0.205 | -0.201 | -0.212 | -0.218 | -0.217 | -0.490 | -0.485 | -0.398 | -0.172 | -0.277 | -0.154 | -0.079 | -0.004 | 0.0500                |
| 0.1500                       | -0.137 | -0.160 | -0.179 | -0.190 | -0.178 | -0.174 | -0.180 | -0.191 | -0.336 | -0.368 | -0.368 | -0.247 | -0.255 |        | -0.082 | 0.011  | 0.1500                |
| 0.2500                       | -0.120 | -0.086 | -0.095 | -0.099 | -0.104 | -0.110 | -0.129 | -0.154 | -0.249 | -0.343 | -0.392 | -0.334 | -0.276 | -0.171 | -0.101 | -0.010 | 0.2500                |
| 0.3500                       | -0.069 | -0.074 | -0.086 | -0.097 | -0.099 | -0.099 | -0.116 | -0.138 | -0.241 | -0.375 | -0.371 | -0.267 | -0.184 | -0.100 | -0.059 | 0.009  | 0.3500                |
| 0.4500                       | -0.122 | -0.149 | -0.150 | -0.160 | -0.153 | -0.146 | -0.147 | -0.141 | -0.390 | -0.464 | -0.423 | -0.283 | -0.179 | -0.052 | -0.031 | 0.030  | 0.4500                |
| 0.5500                       | -0.125 | -0.145 | -0.204 | -0.207 | -0.205 | -0.210 | -0.210 | -0.187 | 0.156  | 0.181  | 0.092  | 0.034  | 0.025  | -0.016 | -0.006 | 0.056  | 0.5500                |
| 0.6500                       | 0.036  | -0.024 | -0.055 | -0.080 | -0.094 | -0.093 | -0.099 | -0.081 | 0.008  | 0.106  | 0.092  | 0.059  | 0.013  | -0.009 | -0.001 | 0.062  | 0.6500                |
| 0.7500                       | 0.232  | 0.157  | 0.120  | 0.086  | 0.070  | 0.063  | 0.057  | 0.079  | 0.086  | 0.103  | 0.103  | 0.060  | 0.012  | -0.024 | -0.020 |        | 0.7500                |
| 0.8500                       | 0.259  | 0.183  | 0.149  | 0.104  | 0.089  | 0.080  | 0.071  | 0.096  | 0.146  | 0.148  | 0.150  | 0.082  | 0.020  | -0.033 | -0.029 | 0.048  | 0.8500                |
| 0.9500                       | 0.091  | 0.026  | -0.011 | -0.051 | -0.061 | -0.069 | -0.078 | -0.059 | 0.220  | 0.194  | 0.155  | 0.093  | 0.023  | -0.065 | -0.050 | 0.033  | 0.9500                |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 5.3° SIDESLIP - Continued  
(a) BVW - Continued

| $\frac{\theta}{2\pi}$       | Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | $\frac{\theta}{2\pi}$ |
|-----------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
|                             | 0.050                        | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  |                       |
|                             | $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 0.699 $\alpha = 15.87$  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | -0.234                       | -0.265 | -0.295 | -0.318 | -0.313 | -0.324 | -0.330 | -0.331 | -0.718 | -0.675 | -0.484 | -0.256 | -0.340 | -0.159 | -0.135 | -0.053 | 0.0500                |
| 0.1500                      | -0.214                       | -0.238 | -0.241 | -0.224 | -0.202 | -0.194 | -0.187 | -0.207 | -0.343 | -0.533 | -0.468 | -0.274 | -0.313 | -0.173 | -0.059 | -0.015 | 0.1500                |
| 0.2500                      | -0.100                       | -0.116 | -0.115 | -0.138 | -0.139 | -0.159 | -0.201 | -0.256 | -0.352 | -0.473 | -0.491 | -0.372 | -0.324 | -0.252 | -0.185 | -0.070 | 0.2500                |
| 0.3500                      | -0.099                       | -0.120 | -0.121 | -0.140 | -0.145 | -0.154 | -0.178 | -0.215 | -0.351 | -0.531 | -0.543 | -0.247 | -0.218 | -0.195 | -0.143 | -0.042 | 0.3500                |
| 0.4500                      | -0.214                       | -0.235 | -0.236 | -0.230 | -0.223 | -0.205 | -0.196 | -0.196 | -0.221 | -0.260 | -0.502 | -0.259 | -0.184 | -0.164 | -0.124 | -0.037 | 0.4500                |
| 0.5500                      | -0.226                       | -0.240 | -0.301 | -0.307 | -0.304 | -0.307 | -0.308 | -0.281 | -0.221 | -0.668 | -0.502 | -0.259 | -0.184 | -0.164 | -0.124 | -0.037 | 0.5500                |
| 0.6500                      | 0.033                        | -0.029 | -0.062 | -0.092 | -0.107 | -0.111 | -0.106 | -0.085 | 0.064  | 0.197  | 0.182  | 0.112  | 0.046  | -0.057 | -0.073 | -0.007 | 0.6500                |
| 0.7500                      | 0.305                        | 0.221  | 0.189  | 0.150  | 0.128  | 0.119  | 0.124  | 0.141  | 0.079  | 0.195  | 0.199  | 0.130  | 0.052  | -0.049 | -0.067 | 0.002  | 0.7500                |
| 0.8500                      | 0.293                        | 0.214  | 0.179  | 0.134  | 0.115  | 0.105  | 0.100  | 0.126  | 0.195  | 0.252  | 0.231  | 0.163  | 0.062  | -0.048 | -0.065 | 0.014  | 0.8500                |
| 0.9500                      | 0.019                        | -0.045 | -0.076 | -0.125 | -0.139 | -0.146 | -0.154 | -0.127 | 0.269  | 0.334  | 0.251  | 0.153  | 0.060  | -0.098 | -0.098 | -0.011 | 0.9500                |
| M = 1.302 $\alpha = -03.90$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | 0.205                        | 0.138  | 0.111  | 0.082  | 0.061  | 0.056  | 0.033  | 0.030  | 0.155  | 0.101  | 0.050  | 0.019  | -0.021 | -0.084 | -0.092 | -0.081 | 0.0500                |
| 0.1500                      | 0.210                        | 0.150  | 0.113  | 0.086  | 0.071  | 0.059  | 0.034  | 0.032  | 0.025  | 0.070  | 0.036  | 0.031  | -0.016 | -0.062 | -0.062 | -0.075 | 0.1500                |
| 0.2500                      | 0.166                        | 0.104  | 0.074  | 0.054  | 0.028  | 0.027  | 0.004  | -0.004 | -0.012 | 0.005  | 0.023  | 0.002  | -0.025 | -0.001 | -0.033 | -0.053 | 0.2500                |
| 0.3500                      | 0.099                        | 0.051  | 0.025  | 0.001  | -0.015 | -0.013 | -0.035 | -0.034 | -0.026 | 0.021  | 0.029  | 0.008  | -0.014 | 0.033  | -0.017 | -0.016 | 0.3500                |
| 0.4500                      | 0.065                        | 0.025  | -0.002 | -0.007 | -0.027 | -0.028 | -0.030 | -0.034 | 0.071  | 0.056  | 0.034  | 0.017  | -0.016 | 0.019  | -0.011 | -0.017 | 0.4500                |
| 0.5500                      | 0.062                        | 0.050  | 0.008  | 0.011  | -0.009 | -0.020 | -0.014 | -0.022 | 0.009  | -0.054 | -0.065 | -0.113 | -0.125 | -0.082 | -0.027 | -0.011 | 0.5500                |
| 0.6500                      | 0.064                        | 0.013  | 0.019  | 0.004  | -0.004 | -0.009 | -0.006 | -0.021 | -0.015 | -0.029 | -0.073 | -0.108 | -0.126 | -0.126 | -0.070 | -0.006 | 0.6500                |
| 0.7500                      | 0.065                        | 0.006  | 0.019  | -0.011 | -0.021 | -0.014 | -0.015 | -0.037 | -0.047 | -0.028 | -0.063 | -0.114 | -0.130 | -0.149 | -0.100 | -0.050 | 0.7500                |
| 0.8500                      | 0.091                        | 0.021  | 0.036  | 0.002  | -0.007 | -0.023 | -0.029 | -0.046 | -0.040 | -0.048 | -0.086 | -0.120 | -0.138 | -0.157 | -0.115 | -0.050 | 0.8500                |
| 0.9500                      | 0.149                        | 0.076  | 0.076  | 0.054  | 0.020  | 0.004  | 0.002  | -0.001 | 0.005  | -0.084 | -0.093 | -0.115 | -0.142 | -0.140 | -0.098 | -0.087 | 0.9500                |
| M = 1.304 $\alpha = -00.05$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | 0.180                        | 0.122  | 0.095  | 0.072  | 0.056  | 0.042  | 0.016  | 0.019  | 0.082  | 0.020  | -0.021 | -0.039 | -0.077 | -0.143 | -0.118 | -0.103 | 0.0500                |
| 0.1500                      | 0.142                        | 0.090  | 0.071  | 0.047  | 0.028  | 0.019  | 0.004  | -0.008 | 0.002  | -0.002 | -0.032 | -0.040 | -0.086 | -0.118 | -0.096 | -0.096 | 0.1500                |
| 0.2500                      | 0.099                        | 0.052  | 0.034  | 0.013  | -0.006 | -0.002 | -0.024 | -0.029 | -0.031 | -0.022 | -0.034 | -0.056 | -0.089 | -0.091 | -0.093 | -0.051 | 0.2500                |
| 0.3500                      | 0.069                        | 0.032  | 0.019  | -0.008 | -0.017 | -0.004 | -0.026 | -0.024 | -0.016 | -0.002 | -0.023 | -0.053 | -0.079 | -0.050 | -0.061 | -0.019 | 0.3500                |
| 0.4500                      | 0.061                        | 0.030  | 0.013  | -0.007 | -0.007 | -0.008 | -0.023 | -0.019 | 0.054  | 0.005  | -0.024 | -0.046 | -0.069 | -0.038 | -0.037 | -0.019 | 0.4500                |
| 0.5500                      | 0.068                        | 0.059  | 0.016  | 0.004  | -0.008 | -0.010 | -0.011 | -0.013 | 0.059  | -0.011 | -0.023 | -0.049 | -0.075 | -0.051 | -0.037 | -0.001 | 0.5500                |
| 0.6500                      | 0.080                        | 0.030  | 0.010  | 0.002  | -0.018 | -0.016 | -0.015 | -0.019 | -0.014 | 0.004  | -0.027 | -0.057 | -0.074 | -0.074 | -0.053 | 0.006  | 0.6500                |
| 0.7500                      | 0.109                        | 0.045  | 0.020  | 0.013  | -0.013 | -0.014 | -0.018 | -0.018 | -0.031 | -0.010 | -0.034 | -0.070 | -0.082 | -0.098 | -0.090 | -0.050 | 0.7500                |
| 0.8500                      | 0.151                        | 0.081  | 0.053  | 0.035  | 0.016  | 0.015  | 0.005  | 0.008  | -0.003 | -0.009 | -0.033 | -0.063 | -0.083 | -0.097 | -0.104 | -0.090 | 0.8500                |
| 0.9500                      | 0.182                        | 0.115  | 0.087  | 0.074  | 0.049  | 0.046  | 0.022  | 0.019  | 0.069  | 0.001  | -0.029 | -0.059 | -0.088 | -0.089 | -0.107 | -0.107 | 0.9500                |
| M = 1.303 $\alpha = 04.11$  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | 0.164                        | 0.085  | 0.057  | 0.035  | 0.018  | 0.001  | -0.015 | -0.015 | 0.004  | -0.074 | -0.080 | -0.100 | -0.138 | -0.178 | -0.145 | -0.124 | 0.0500                |
| 0.1500                      | 0.099                        | 0.035  | 0.010  | -0.012 | -0.027 | -0.030 | -0.028 | -0.041 | -0.074 | -0.095 | -0.113 | -0.151 | -0.145 | -0.169 | -0.169 | -0.100 | 0.1500                |
| 0.2500                      | 0.067                        | 0.015  | -0.001 | -0.012 | -0.035 | -0.037 | -0.036 | -0.036 | -0.037 | -0.079 | -0.091 | -0.113 | -0.145 | -0.153 | -0.150 | -0.065 | 0.2500                |
| 0.3500                      | 0.064                        | 0.020  | 0.007  | -0.011 | -0.022 | -0.018 | -0.022 | -0.016 | -0.007 | -0.035 | -0.079 | -0.108 | -0.141 | -0.133 | -0.121 | -0.057 | 0.3500                |
| 0.4500                      | 0.064                        | 0.018  | -0.001 | -0.007 | -0.022 | -0.019 | -0.028 | -0.022 | 0.005  | -0.054 | -0.089 | -0.101 | -0.133 | -0.114 | -0.055 | -0.046 | 0.4500                |
| 0.5500                      | 0.065                        | 0.045  | 0.001  | -0.006 | -0.025 | -0.033 | -0.046 | -0.040 | 0.088  | 0.016  | 0.021  | 0.001  | -0.060 | -0.064 | -0.040 | -0.035 | 0.5500                |
| 0.6500                      | 0.092                        | 0.038  | 0.024  | -0.003 | -0.017 | -0.017 | -0.033 | -0.037 | 0.051  | 0.041  | 0.024  | 0.001  | -0.016 | -0.024 | -0.064 | -0.023 | 0.6500                |
| 0.7500                      | 0.157                        | 0.094  | 0.071  | 0.043  | 0.026  | 0.023  | 0.003  | 0.009  | -0.022 | -0.002 | 0.019  | -0.016 | -0.021 | -0.019 | -0.048 | -0.048 | 0.7500                |
| 0.8500                      | 0.210                        | 0.141  | 0.111  | 0.085  | 0.063  | 0.060  | 0.031  | 0.034  | 0.010  | 0.035  | 0.034  | -0.013 | -0.024 | -0.038 | -0.083 | -0.095 | 0.8500                |
| 0.9500                      | 0.210                        | 0.133  | 0.105  | 0.088  | 0.059  | 0.046  | 0.022  | 0.020  | 0.141  | 0.066  | 0.041  | 0.007  | -0.018 | -0.030 | -0.105 | -0.112 | 0.9500                |
| M = 1.302 $\alpha = 08.11$  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                      | 0.106                        | 0.044  | 0.010  | -0.020 | -0.033 | -0.046 | -0.059 | -0.064 | -0.081 | -0.165 | -0.150 | -0.130 | -0.219 | -0.174 | -0.220 | -0.131 | 0.0500                |
| 0.1500                      | 0.028                        | -0.004 | -0.035 | -0.056 | -0.067 | -0.062 | -0.065 | -0.076 | -0.082 | -0.144 | -0.150 | -0.168 | -0.207 | -0.178 | -0.179 | -0.092 | 0.1500                |
| 0.2500                      | 0.027                        | 0.004  | -0.013 | -0.012 | -0.037 | -0.034 | -0.036 | -0.036 | -0.054 | -0.076 | -0.139 | -0.168 | -0.194 | -0.187 | -0.187 | -0.077 | 0.2500                |
| 0.3500                      | 0.037                        | 0.017  | 0.011  | -0.005 | -0.020 | -0.014 | -0.010 | -0.010 | -0.062 | -0.123 | -0.166 | -0.192 | -0.168 | -0.126 | -0.114 | -0.035 | 0.3500                |
| 0.4500                      | 0.030                        | 0.002  | -0.023 | -0.031 | -0.039 | -0.038 | -0.041 | -0.044 | -0.042 | -0.123 | -0.156 | -0.189 | -0.189 | -0.137 | -0.061 | -0.066 | 0.4500                |
| 0.5500                      | 0.043                        | 0.026  | -0.032 | -0.037 | -0.065 | -0.070 | -0.082 | -0.079 | 0.077  | 0.048  | 0.107  | -0.003 | 0.067  | -0.039 | -0.032 | -0.027 | 0.5500                |
| 0.6500                      | 0.129                        | 0.063  | 0.037  | 0.004  | -0.012 | -0.018 | -0.043 | -0.040 | -0.029 | 0.051  | 0.109  | 0.068  | 0.067  | 0.038  | -0.009 | -0.048 | 0.6500                |
| 0.7500                      | 0.239                        | 0.169  | 0.130  | 0.104  | 0.077  | 0.070  | 0.041  | 0.044  | -0.007 | 0.025  | 0.103  | 0.083  | 0.061  | 0.042  | 0.001  | 0.001  | 0.7500                |
| 0.8500                      | 0.282                        | 0.208  | 0.167  | 0.140  | 0.112  | 0.103  | 0.071  | 0.071  | 0.037  | 0.134  | 0.114  | 0.077  | 0.067  | 0.041  | -0.020 | -0.084 | 0.8500                |
| 0.9500                      | 0.212                        | 0.143  | 0.106  | 0.084  | 0.052  | 0.038  | 0.018  | 0.010  | 0.187  | 0.169  | 0.130  | 0.094  | 0.072  | 0.033  | -0.095 | -0.126 | 0.9500                |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 5.3° SIDESLIP - Continued  
(a) BVW - Continued

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| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 1.302 $\alpha = 12.21$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.028  | -0.052 | -0.076 | -0.106 | -0.129 | -0.131 | -0.155 | -0.158 | -0.189 | -0.261 | -0.203 | -0.223 | -0.256 | -0.243 | -0.170 | -0.135 | 0.0500                |
| 0.1500                       | -0.031 | -0.078 | -0.098 | -0.115 | -0.120 | -0.113 | -0.112 | -0.101 | -0.084 | -0.183 | -0.198 | -0.208 | -0.245 | -0.195 | -0.172 | -0.065 | 0.1500                |
| 0.2500                       | -0.015 | -0.037 | -0.021 | -0.049 | -0.048 | -0.048 | -0.070 | -0.071 | -0.083 | -0.146 | -0.218 | -0.271 | -0.282 | -0.195 | -0.185 | -0.113 | 0.2500                |
| 0.3500                       | 0.013  | -0.017 | -0.011 | -0.039 | -0.047 | -0.045 | -0.061 | -0.062 | -0.065 | -0.146 | -0.167 | -0.222 | -0.247 | -0.116 | -0.109 | -0.108 | 0.3500                |
| 0.4500                       | -0.022 | -0.065 | -0.087 | -0.079 | -0.098 | -0.087 | -0.084 | -0.081 | -0.109 | -0.198 | -0.220 | -0.224 | -0.251 | -0.116 | -0.047 | -0.063 | 0.4500                |
| 0.5500                       | -0.006 | -0.032 | -0.100 | -0.121 | -0.130 | -0.151 | -0.152 | -0.157 | 0.135  | 0.059  | 0.187  | 0.161  | 0.150  | 0.097  | -0.010 | -0.011 | 0.5500                |
| 0.6500                       | 0.051  | 0.076  | 0.041  | -0.020 | -0.031 | -0.051 | -0.057 | -0.073 | 0.062  | 0.194  | 0.162  | 0.149  | 0.125  | 0.028  | -0.050 | 0.6500 |                       |
| 0.7500                       | 0.310  | 0.230  | 0.188  | 0.148  | 0.126  | 0.108  | 0.097  | 0.079  | 0.051  | 0.061  | 0.198  | 0.164  | 0.144  | 0.125  | 0.051  | 0.7500 |                       |
| 0.8500                       | 0.334  | 0.249  | 0.207  | 0.168  | 0.144  | 0.130  | 0.106  | 0.098  | 0.069  | 0.207  | 0.228  | 0.183  | 0.169  | 0.135  | 0.014  | -0.061 | 0.8500                |
| 0.9500                       | 0.193  | 0.119  | 0.073  | 0.035  | 0.013  | 0.002  | -0.019 | -0.033 | 0.218  | 0.244  | 0.233  | 0.195  | 0.172  | 0.113  | -0.080 | -0.126 | 0.9500                |
| M = 1.300 $\alpha = 16.07$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.078 | -0.147 | -0.183 | -0.233 | -0.236 | -0.252 | -0.265 | -0.271 | -0.317 | -0.325 | -0.268 | -0.275 | -0.314 | -0.199 | -0.187 | -0.138 | 0.0500                |
| 0.1500                       | -0.091 | -0.142 | -0.138 | -0.140 | -0.141 | -0.123 | -0.122 | -0.113 | -0.111 | -0.195 | -0.272 | -0.277 | -0.297 | -0.188 | -0.188 | -0.039 | 0.1500                |
| 0.2500                       | -0.002 | -0.041 | -0.047 | -0.084 | -0.095 | -0.099 | -0.122 | -0.136 | -0.126 | -0.198 | -0.275 | -0.318 | -0.340 | -0.279 | -0.201 | -0.130 | 0.2500                |
| 0.3500                       | -0.003 | -0.045 | -0.053 | -0.097 | -0.100 | -0.092 | -0.105 | -0.125 | -0.133 | -0.228 | -0.316 | -0.271 | -0.272 | -0.170 | -0.013 | -0.096 | 0.3500                |
| 0.4500                       | -0.096 | -0.145 | -0.141 | -0.149 | -0.154 | -0.139 | -0.129 | -0.122 | -0.143 | -0.302 | -0.283 | -0.300 | -0.278 | -0.065 | 0.014  | -0.067 | 0.4500                |
| 0.5500                       | -0.079 | -0.106 | -0.177 | -0.220 | -0.239 | -0.248 | -0.267 | -0.271 | 0.101  | 0.103  | 0.263  | 0.258  | 0.237  | 0.155  | 0.076  | 0.003  | 0.5500                |
| 0.6500                       | 0.171  | 0.088  | 0.058  | 0.005  | -0.023 | -0.039 | -0.054 | -0.078 | -0.093 | 0.009  | 0.274  | 0.259  | 0.234  | 0.219  | 0.090  | -0.020 | 0.6500                |
| 0.7500                       | 0.386  | 0.294  | 0.268  | 0.212  | 0.181  | 0.165  | 0.142  | 0.128  | 0.091  | 0.086  | 0.283  | 0.262  | 0.234  | 0.228  | 0.116  | 0.7500 |                       |
| 0.8500                       | 0.383  | 0.288  | 0.261  | 0.198  | 0.173  | 0.157  | 0.132  | 0.117  | 0.104  | 0.230  | 0.318  | 0.292  | 0.249  | 0.237  | 0.068  | -0.044 | 0.8500                |
| 0.9500                       | 0.159  | 0.077  | 0.041  | -0.014 | -0.040 | -0.056 | -0.078 | -0.093 | 0.224  | 0.351  | 0.323  | 0.299  | 0.250  | 0.203  | -0.065 | -0.136 | 0.9500                |
| M = 2.228 $\alpha = -03.75$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.185  | 0.130  | 0.115  | 0.081  | 0.070  | 0.058  | 0.046  | 0.041  | 0.051  | 0.062  | 0.027  | -0.006 | -0.033 | -0.027 | -0.065 | -0.047 | 0.0500                |
| 0.1500                       | 0.195  | 0.133  | 0.114  | 0.082  | 0.066  | 0.059  | 0.047  | 0.040  | 0.032  | 0.029  | 0.021  | 0.014  | -0.009 | -0.028 | -0.041 | 0.1500 |                       |
| 0.2500                       | 0.141  | 0.092  | 0.075  | 0.049  | 0.034  | 0.021  | 0.018  | 0.011  | -0.006 | 0.003  | -0.006 | 0.003  | -0.016 | -0.015 | -0.025 | -0.035 | 0.2500                |
| 0.3500                       | 0.086  | 0.044  | 0.028  | 0.008  | -0.003 | -0.001 | -0.006 | -0.019 | -0.019 | -0.032 | 0.005  | 0.004  | -0.012 | -0.013 | -0.028 | -0.019 | 0.3500                |
| 0.4500                       | 0.052  | 0.020  | 0.008  | -0.009 | -0.008 | -0.011 | -0.015 | -0.025 | 0.025  | 0.011  | 0.011  | 0.010  | -0.006 | -0.011 | -0.025 | -0.008 | 0.4500                |
| 0.5500                       | 0.042  | 0.106  | 0.009  | 0.004  | -0.001 | -0.004 | -0.010 | -0.013 | 0.006  | -0.020 | -0.030 | -0.049 | -0.052 | -0.051 | -0.020 | -0.023 | 0.5500                |
| 0.6500                       | 0.041  | 0.015  | 0.009  | 0.003  | -0.002 | -0.003 | -0.011 | -0.013 | -0.005 | -0.017 | -0.042 | -0.046 | -0.057 | -0.055 | -0.038 | -0.038 | 0.6500                |
| 0.7500                       | 0.048  | 0.019  | 0.011  | -0.003 | -0.018 | -0.013 | -0.019 | -0.022 | -0.019 | -0.024 | -0.025 | -0.047 | -0.056 | -0.065 | -0.066 | 0.7500 |                       |
| 0.8500                       | 0.080  | 0.043  | 0.030  | 0.012  | -0.006 | -0.012 | -0.017 | -0.025 | -0.021 | -0.026 | -0.025 | -0.050 | -0.061 | -0.067 | -0.079 | -0.068 | 0.8500                |
| 0.9500                       | 0.136  | 0.086  | 0.077  | 0.048  | 0.035  | 0.022  | 0.014  | 0.006  | 0.007  | -0.021 | -0.046 | -0.053 | -0.062 | -0.071 | -0.047 | -0.063 | 0.9500                |
| M = 2.232 $\alpha = 00.30$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.168  | 0.119  | 0.098  | 0.071  | 0.059  | 0.045  | 0.038  | 0.030  | 0.049  | 0.023  | -0.006 | -0.004 | -0.039 | -0.034 | -0.045 | -0.054 | 0.0500                |
| 0.1500                       | 0.138  | 0.087  | 0.069  | 0.040  | 0.031  | 0.022  | 0.016  | 0.006  | -0.014 | -0.003 | -0.018 | -0.027 | -0.051 | -0.049 | -0.049 | -0.059 | 0.1500                |
| 0.2500                       | 0.086  | 0.047  | 0.037  | 0.015  | 0.007  | -0.001 | -0.008 | -0.013 | -0.008 | -0.021 | -0.029 | -0.034 | -0.054 | -0.046 | -0.060 | -0.062 | 0.2500                |
| 0.3500                       | 0.060  | 0.026  | 0.015  | 0.005  | -0.006 | -0.002 | -0.003 | -0.013 | -0.020 | -0.023 | -0.017 | -0.033 | -0.048 | -0.047 | -0.055 | -0.030 | 0.3500                |
| 0.4500                       | 0.051  | 0.024  | 0.014  | 0.004  | 0.000  | 0.003  | -0.004 | -0.013 | -0.011 | -0.008 | -0.015 | -0.026 | -0.042 | -0.046 | -0.040 | -0.025 | 0.4500                |
| 0.5500                       | 0.049  | 0.114  | 0.013  | 0.006  | 0.006  | 0.001  | -0.006 | -0.013 | 0.022  | -0.008 | -0.015 | -0.023 | -0.037 | -0.045 | 0.031  | -0.023 | 0.5500                |
| 0.6500                       | 0.059  | 0.028  | 0.017  | 0.003  | -0.004 | 0.000  | -0.012 | -0.017 | -0.017 | -0.019 | -0.011 | -0.030 | -0.039 | -0.043 | -0.056 | 0.6500 |                       |
| 0.7500                       | 0.090  | 0.049  | 0.036  | 0.020  | 0.006  | -0.001 | -0.003 | -0.009 | -0.019 | -0.019 | -0.011 | -0.030 | -0.039 | -0.043 | -0.056 | 0.7500 |                       |
| 0.8500                       | 0.137  | 0.085  | 0.072  | 0.050  | 0.039  | 0.027  | 0.012  | 0.009  | 0.001  | 0.005  | -0.013 | -0.031 | -0.040 | -0.046 | -0.058 | -0.060 | 0.8500                |
| 0.9500                       | 0.167  | 0.118  | 0.095  | 0.077  | 0.056  | 0.052  | 0.036  | 0.030  | 0.040  | 0.020  | -0.011 | -0.026 | -0.040 | -0.048 | -0.049 | -0.058 | 0.9500                |
| M = 2.232 $\alpha = 04.36$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.137  | 0.083  | 0.070  | 0.037  | 0.033  | 0.015  | 0.011  | 0.002  | 0.007  | -0.008 | -0.046 | -0.062 | -0.073 | -0.056 | -0.049 | -0.064 | 0.0500                |
| 0.1500                       | 0.085  | 0.037  | 0.021  | -0.001 | -0.010 | -0.017 | -0.024 | -0.028 | -0.039 | -0.043 | -0.068 | -0.064 | -0.084 | -0.076 | -0.090 | -0.070 | 0.1500                |
| 0.2500                       | 0.043  | 0.013  | 0.000  | -0.009 | -0.020 | -0.020 | -0.021 | -0.024 | -0.035 | -0.041 | -0.057 | -0.061 | -0.084 | -0.076 | -0.090 | -0.070 | 0.2500                |
| 0.3500                       | 0.036  | 0.012  | 0.006  | -0.001 | -0.010 | -0.006 | -0.003 | -0.013 | -0.025 | -0.033 | -0.046 | -0.058 | -0.079 | -0.075 | -0.085 | -0.056 | 0.3500                |
| 0.4500                       | 0.039  | 0.013  | 0.005  | -0.001 | -0.010 | -0.010 | -0.011 | -0.018 | -0.007 | -0.032 | -0.052 | -0.058 | -0.074 | -0.078 | -0.041 | -0.031 | 0.4500                |
| 0.5500                       | 0.047  | 0.109  | 0.004  | -0.012 | -0.017 | -0.017 | -0.023 | -0.030 | 0.002  | -0.019 | -0.011 | -0.007 | -0.009 | -0.009 | -0.026 | -0.022 | 0.5500                |
| 0.6500                       | 0.087  | 0.045  | 0.035  | 0.004  | -0.006 | -0.005 | -0.015 | -0.023 | -0.010 | -0.003 | 0.016  | 0.012  | 0.002  | -0.005 | -0.016 | -0.028 | 0.6500                |
| 0.7500                       | 0.148  | 0.103  | 0.087  | 0.053  | 0.041  | 0.026  | 0.020  | 0.011  | -0.018 | -0.012 | 0.001  | 0.002  | 0.007  | -0.011 | -0.024 | 0.7500 |                       |
| 0.8500                       | 0.197  | 0.145  | 0.126  | 0.091  | 0.075  | 0.065  | 0.048  | 0.044  | 0.019  | 0.010  | 0.028  | 0.006  | -0.002 | -0.009 | -0.021 | -0.036 | 0.8500                |
| 0.9500                       | 0.189  | 0.135  | 0.116  | 0.086  | 0.065  | 0.054  | 0.048  | 0.036  | 0.040  | 0.071  | 0.042  | 0.017  | 0.002  | -0.006 | -0.032 | -0.047 | 0.9500                |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 5.3° SIDESLIP - Continued  
(a) BVW - Concluded

| $\frac{\theta}{2\pi}$      | Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | $\frac{\theta}{2\pi}$ |
|----------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
|                            | 0.050                        | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  |                       |
|                            | $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 2.229 $\alpha = 08.31$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | 0.095                        | 0.051  | 0.033  | 0.003  | -0.007 | -0.019 | -0.031 | -0.036 | -0.047 | -0.083 | -0.104 | -0.037 | -0.089 | -0.102 | -0.059 | -0.073 | 0.0500                |
| 0.1500                     | 0.038                        | -0.008 | -0.021 | -0.043 | -0.051 | -0.057 | -0.060 | -0.061 | -0.067 | -0.085 | -0.091 | -0.080 | -0.100 | -0.098 | -0.086 | -0.086 | 0.1500                |
| 0.2500                     | 0.014                        | -0.009 | -0.016 | -0.019 | -0.024 | -0.022 | -0.021 | -0.030 | -0.040 | -0.049 | -0.080 | -0.083 | -0.102 | -0.098 | -0.110 | -0.095 | 0.2500                |
| 0.3500                     | 0.018                        | 0.001  | -0.002 | -0.009 | -0.010 | -0.008 | -0.005 | -0.017 | -0.021 | -0.032 | -0.068 | -0.081 | -0.104 | -0.097 | -0.110 | -0.077 | 0.3500                |
| 0.4500                     | 0.015                        | -0.007 | -0.022 | -0.026 | -0.029 | -0.029 | -0.030 | -0.035 | -0.036 | -0.039 | -0.079 | -0.076 | -0.096 | -0.097 | -0.063 | -0.033 | 0.4500                |
| 0.5500                     | 0.036                        | 0.097  | -0.016 | -0.039 | -0.049 | -0.050 | -0.059 | -0.066 | -0.026 | 0.008  | 0.046  | 0.009  | 0.013  | 0.005  | -0.019 | -0.007 | 0.5500                |
| 0.6500                     | 0.122                        | 0.074  | 0.056  | 0.026  | 0.005  | 0.006  | -0.010 | -0.019 | -0.031 | -0.040 | 0.041  | 0.051  | 0.054  | 0.046  | 0.019  | -0.007 | 0.6500                |
| 0.7500                     | 0.216                        | 0.161  | 0.147  | 0.104  | 0.088  | 0.074  | 0.066  | 0.051  | 0.026  | 0.010  | 0.036  | 0.041  | 0.038  | 0.032  | 0.022  |        | 0.7500                |
| 0.8500                     | 0.250                        | 0.195  | 0.181  | 0.129  | 0.120  | 0.099  | 0.090  | 0.077  | 0.062  | 0.044  | 0.050  | 0.059  | 0.048  | 0.041  | 0.024  | 0.004  | 0.8500                |
| 0.9500                     | 0.192                        | 0.146  | 0.123  | 0.087  | 0.073  | 0.055  | 0.044  | 0.036  | 0.069  | 0.106  | 0.102  | 0.074  | 0.058  | 0.044  | -0.017 | -0.034 | 0.9500                |
| M = 2.232 $\alpha = 12.41$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | 0.049                        | 0.003  | -0.012 | -0.044 | -0.051 | -0.069 | -0.082 | -0.085 | -0.102 | -0.117 | -0.135 | -0.110 | -0.114 | -0.082 | -0.065 | -0.074 | 0.0500                |
| 0.1500                     | -0.011                       | -0.054 | -0.073 | -0.101 | -0.105 | -0.105 | -0.097 | -0.088 | -0.096 | -0.108 | -0.135 | -0.113 | -0.126 | -0.106 | -0.109 | -0.109 | 0.1500                |
| 0.2500                     | -0.015                       | -0.045 | -0.045 | -0.031 | -0.037 | -0.038 | -0.042 | -0.052 | -0.074 | -0.080 | -0.117 | -0.111 | -0.138 | -0.125 | -0.141 | -0.109 | 0.2500                |
| 0.3500                     | -0.014                       | -0.025 | -0.020 | -0.031 | -0.035 | -0.035 | -0.034 | -0.043 | -0.053 | -0.070 | -0.102 | -0.115 | -0.131 | -0.124 | -0.122 | -0.076 | 0.3500                |
| 0.4500                     | -0.026                       | -0.047 | -0.061 | -0.075 | -0.076 | -0.073 | -0.069 | -0.071 | -0.086 | -0.135 | -0.124 | -0.103 | -0.119 | -0.118 | -0.065 | -0.050 | 0.4500                |
| 0.5500                     | 0.020                        | 0.080  | -0.041 | -0.068 | -0.081 | -0.088 | -0.100 | -0.110 | -0.089 | 0.023  | 0.020  | 0.014  | 0.094  | 0.060  | -0.001 | -0.024 | 0.5500                |
| 0.6500                     | 0.163                        | 0.111  | 0.089  | 0.059  | 0.036  | 0.032  | 0.015  | 0.001  | -0.023 | -0.021 | 0.042  | 0.089  | 0.093  | 0.092  | 0.079  |        | 0.6500                |
| 0.7500                     | 0.292                        | 0.237  | 0.208  | 0.171  | 0.149  | 0.138  | 0.126  | 0.109  | 0.076  | 0.039  | 0.042  | 0.089  | 0.093  | 0.092  | 0.079  |        | 0.7500                |
| 0.8500                     | 0.311                        | 0.252  | 0.226  | 0.186  | 0.167  | 0.149  | 0.140  | 0.118  | 0.102  | 0.077  | 0.081  | 0.090  | 0.095  | 0.100  | 0.079  | 0.055  | 0.8500                |
| 0.9500                     | 0.202                        | 0.147  | 0.123  | 0.087  | 0.065  | 0.056  | 0.041  | 0.031  | 0.046  | 0.160  | 0.159  | 0.123  | 0.112  | 0.103  | 0.007  | -0.007 | 0.9500                |
| M = 2.232 $\alpha = 16.32$ |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                     | 0.007                        | -0.040 | -0.052 | -0.079 | -0.082 | -0.099 | -0.109 | -0.116 | -0.132 | -0.135 | -0.156 | -0.131 | -0.142 | -0.119 | -0.059 | -0.088 | 0.0500                |
| 0.1500                     | -0.049                       | -0.089 | -0.095 | -0.113 | -0.115 | -0.111 | -0.109 | -0.106 | -0.118 | -0.152 | -0.131 | -0.134 | -0.147 | -0.119 | -0.125 | -0.125 | 0.1500                |
| 0.2500                     | -0.062                       | -0.066 | -0.068 | -0.077 | -0.080 | -0.090 | -0.099 | -0.108 | -0.112 | -0.117 | -0.134 | -0.128 | -0.154 | -0.143 | -0.154 | -0.092 | 0.2500                |
| 0.3500                     | -0.063                       | -0.085 | -0.087 | -0.093 | -0.082 | -0.084 | -0.087 | -0.106 | -0.118 | -0.125 | -0.142 | -0.137 | -0.152 | -0.131 | -0.116 | -0.080 | 0.3500                |
| 0.4500                     | -0.069                       | -0.084 | -0.096 | -0.116 | -0.117 | -0.113 | -0.104 | -0.106 | -0.118 | -0.152 | -0.151 | -0.141 | -0.156 | -0.136 | -0.080 | -0.056 | 0.4500                |
| 0.5500                     | 0.014                        | 0.077  | -0.048 | -0.074 | -0.088 | -0.092 | -0.105 | -0.115 | -0.081 | 0.073  | 0.095  | 0.025  | 0.106  | 0.168  | -0.037 | -0.024 | 0.5500                |
| 0.6500                     | 0.219                        | 0.160  | 0.139  | 0.107  | 0.082  | 0.073  | 0.054  | 0.039  | 0.021  | 0.031  | 0.043  | 0.136  | 0.161  | 0.175  | 0.091  |        | 0.6500                |
| 0.7500                     | 0.386                        | 0.318  | 0.293  | 0.250  | 0.223  | 0.207  | 0.193  | 0.171  | 0.133  | 0.123  | 0.088  | 0.155  | 0.160  | 0.157  | 0.143  |        | 0.7500                |
| 0.8500                     | 0.381                        | 0.315  | 0.288  | 0.244  | 0.220  | 0.199  | 0.190  | 0.169  | 0.155  | 0.147  | 0.173  | 0.197  | 0.177  | 0.174  | 0.149  | 0.111  | 0.8500                |
| 0.9500                     | 0.208                        | 0.151  | 0.128  | 0.087  | 0.069  | 0.055  | 0.049  | 0.028  | 0.071  | 0.150  | 0.249  | 0.221  | 0.200  | 0.182  | 0.019  | 0.006  | 0.9500                |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT  $5.3^\circ$  SIDESLIP - Continued  
(b) BVWC;  $\delta = 0.5^\circ$

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| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |
| M = 0.699 $\alpha = -04.10$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 0.0500                       | 0.142  | 0.145  | 0.107  | -0.041 | -0.023 | 0.015  | -0.018 | -0.021 | 0.051  | 0.002  | -0.005 | -0.027 | -0.061 | -0.071 | -0.031 | 0.033  |
| 0.1500                       | 0.142  | 0.133  | 0.078  | -0.012 | 0.008  | -0.005 | -0.018 | -0.004 | 0.014  | 0.013  | -0.016 | -0.034 | -0.061 | -0.036 | -0.013 | 0.060  |
| 0.2500                       | 0.106  | 0.062  | 0.048  | -0.008 | -0.025 | -0.017 | -0.032 | -0.031 | -0.017 | -0.038 | -0.044 | -0.049 |        |        | -0.010 | 0.064  |
| 0.3500                       | 0.041  | 0.035  | 0.012  | -0.040 | -0.041 | -0.049 | -0.059 | -0.051 | -0.029 | -0.044 | -0.045 | -0.046 | -0.009 | -0.003 | -0.001 | 0.065  |
| 0.4500                       | 0.003  | 0.039  | 0.015  | -0.101 | -0.051 | -0.059 | -0.066 | -0.052 | 0.027  | -0.014 | -0.032 | -0.036 | -0.024 | 0.002  | 0.016  | 0.065  |
| 0.5500                       | -0.003 | -0.031 | -0.118 | -0.146 | -0.026 | -0.058 | -0.065 | -0.048 | -0.067 | -0.133 | -0.168 | -0.128 | -0.091 | 0.004  | 0.019  | 0.060  |
| 0.6500                       | -0.009 | -0.058 | -0.100 | -0.147 | -0.058 | -0.064 | -0.067 | -0.052 | -0.070 | -0.114 | -0.151 | -0.156 | -0.113 | -0.017 | 0.009  | 0.057  |
| 0.7500                       | -0.010 | -0.064 | -0.100 | -0.117 | -0.075 | -0.070 | -0.082 | -0.071 | -0.082 | -0.128 | -0.160 | -0.155 | -0.120 | -0.042 | -0.011 | 0.050  |
| 0.8500                       | -0.002 | -0.064 | -0.098 | -0.102 | -0.067 | -0.072 | -0.078 | -0.076 | -0.096 | -0.142 | -0.174 | -0.160 | -0.127 | -0.051 | -0.020 | 0.051  |
| 0.9500                       | 0.025  | -0.022 | -0.077 | -0.105 | -0.041 | -0.044 | -0.048 | -0.052 | -0.090 | -0.169 | -0.202 | -0.170 | -0.137 | -0.047 | -0.019 | 0.050  |
| M = 0.700 $\alpha = -00.05$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 0.0500                       | 0.115  | 0.074  | 0.010  | -0.073 | -0.026 | 0.007  | -0.027 | -0.035 | 0.005  | -0.045 | -0.094 | -0.104 | -0.122 | -0.070 | -0.039 | -0.003 |
| 0.1500                       | 0.079  | 0.031  | -0.026 | -0.079 | 0.003  | -0.033 | -0.056 | -0.039 | -0.056 | -0.067 | -0.103 | -0.099 | -0.127 | -0.069 | -0.032 | 0.042  |
| 0.2500                       | 0.032  | 0.001  | -0.049 | -0.075 | -0.054 | -0.066 | -0.073 | -0.074 | -0.074 | -0.085 | -0.111 | -0.110 |        |        | -0.033 | 0.044  |
| 0.3500                       | 0.005  | -0.022 | -0.062 | -0.095 | -0.078 | -0.074 | -0.080 | -0.076 | -0.056 | -0.087 | -0.109 | -0.112 | -0.066 | -0.034 | -0.024 | 0.045  |
| 0.4500                       | 0.000  | -0.027 | -0.068 | -0.160 | -0.051 | -0.071 | -0.076 | -0.071 | -0.033 | -0.081 | -0.103 | -0.100 | -0.081 | -0.029 | -0.007 | 0.044  |
| 0.5500                       | -0.005 | -0.009 | -0.052 | -0.161 | -0.039 | -0.068 | -0.072 | -0.057 | -0.025 | -0.078 | -0.105 | -0.097 | -0.077 | -0.019 | 0.002  | 0.043  |
| 0.6500                       | -0.001 | -0.010 | -0.053 | -0.117 | -0.053 | -0.075 | -0.075 | -0.059 | -0.039 | -0.085 | -0.107 | -0.107 | -0.079 | -0.013 | 0.000  | 0.043  |
| 0.7500                       | 0.019  | -0.013 | -0.052 | -0.088 | -0.069 | -0.075 | -0.082 | -0.071 | -0.071 | -0.085 | -0.107 | -0.112 | -0.093 | -0.046 | -0.014 | 0.043  |
| 0.8500                       | 0.057  | 0.016  | -0.029 | -0.065 | -0.041 | -0.067 | -0.072 | -0.060 | -0.068 | -0.087 | -0.111 | -0.119 | -0.105 | -0.057 | -0.025 | 0.041  |
| 0.9500                       | 0.092  | 0.059  | 0.001  | -0.069 | -0.001 | -0.040 | -0.058 | -0.040 | -0.034 | -0.083 | -0.109 | -0.114 | -0.102 | -0.052 | -0.033 | 0.042  |
| M = 0.699 $\alpha = 03.96$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 0.0500                       | 0.068  | -0.013 | -0.072 | -0.127 | 0.013  | -0.030 | -0.045 | -0.036 | -0.066 | -0.145 | -0.204 | -0.135 | -0.195 | -0.068 | -0.045 | 0.006  |
| 0.1500                       | 0.006  | -0.073 | -0.120 | -0.121 | -0.064 | -0.065 | -0.084 | -0.074 | -0.084 | -0.150 | -0.167 | -0.178 | -0.179 | -0.101 | -0.040 | 0.024  |
| 0.2500                       | -0.022 | -0.084 | -0.124 | -0.118 | -0.097 | -0.090 | -0.094 | -0.096 | -0.105 | -0.139 | -0.167 | -0.157 |        |        | -0.045 | 0.026  |
| 0.3500                       | -0.029 | -0.088 | -0.126 | -0.127 | -0.091 | -0.084 | -0.092 | -0.084 | -0.089 | -0.125 | -0.168 | -0.159 | -0.116 | -0.064 | -0.032 | 0.030  |
| 0.4500                       | -0.023 | -0.095 | -0.165 | -0.195 | -0.060 | -0.076 | -0.083 | -0.068 | -0.060 | -0.120 | -0.157 | -0.152 | -0.122 | -0.040 | -0.019 | 0.033  |
| 0.5500                       | -0.019 | 0.054  | -0.006 | -0.134 | -0.036 | -0.073 | -0.078 | -0.059 | -0.006 | -0.050 | -0.080 | -0.089 | -0.097 | -0.027 | -0.006 | 0.039  |
| 0.6500                       | -0.011 | 0.026  | -0.001 | -0.071 | -0.052 | -0.069 | -0.077 | -0.068 | -0.045 | -0.053 | -0.053 | -0.056 | -0.062 | -0.023 | -0.007 | 0.042  |
| 0.7500                       | 0.071  | 0.056  | 0.029  | -0.035 | -0.042 | -0.056 | -0.068 | -0.060 | -0.039 | -0.050 | -0.057 | -0.065 | -0.067 | -0.048 | -0.024 | 0.070  |
| 0.8500                       | 0.139  | 0.105  | 0.058  | -0.010 | -0.009 | -0.027 | -0.039 | -0.030 | -0.017 | -0.034 | -0.054 | -0.066 | -0.066 | -0.051 | -0.031 | 0.039  |
| 0.9500                       | 0.141  | 0.149  | 0.100  | -0.044 | 0.021  | -0.022 | -0.032 | -0.022 | 0.017  | -0.012 | -0.034 | -0.049 | -0.060 | -0.049 | -0.033 | 0.041  |
| M = 0.700 $\alpha = 07.96$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 0.0500                       | -0.004 | -0.103 | -0.087 | -0.050 | 0.021  | -0.008 | -0.073 | -0.059 | -0.158 | -0.283 | -0.309 | -0.251 | -0.171 | -0.058 | -0.028 | 0.026  |
| 0.1500                       | -0.074 | -0.181 | -0.217 | -0.165 | 0.055  | -0.069 | -0.087 | -0.094 | -0.154 | -0.247 | -0.280 | -0.257 | -0.219 | -0.110 | -0.052 | 0.033  |
| 0.2500                       | -0.061 | -0.168 | -0.197 | -0.153 | -0.104 | -0.088 | -0.098 | -0.104 | -0.144 | -0.204 | -0.254 | -0.214 |        |        | -0.047 | 0.032  |
| 0.3500                       | -0.061 | -0.155 | -0.196 | -0.169 | -0.097 | -0.084 | -0.089 | -0.092 | -0.135 | -0.182 | -0.230 | -0.208 | -0.103 | -0.013 | -0.030 | 0.041  |
| 0.4500                       | -0.048 | -0.211 | -0.252 | -0.226 | -0.054 | -0.078 | -0.080 | -0.075 | -0.105 | -0.190 | -0.252 | -0.218 | -0.145 | -0.019 | -0.010 | 0.051  |
| 0.5500                       | -0.051 | 0.028  | -0.102 | -0.063 | -0.035 | -0.075 | -0.077 | -0.067 | 0.058  | 0.059  | 0.038  | 0.036  | -0.052 | -0.006 | 0.011  | 0.058  |
| 0.6500                       | 0.049  | 0.104  | 0.090  | -0.019 | -0.028 | -0.062 | -0.074 | -0.058 | 0.061  | 0.006  | 0.019  | 0.022  | -0.003 | 0.005  | 0.013  | 0.066  |
| 0.7500                       | 0.174  | 0.130  | 0.099  | 0.014  | -0.004 | -0.024 | -0.031 | -0.028 | 0.026  | 0.033  | 0.030  | 0.010  | -0.007 | -0.014 | -0.008 | 0.7500 |
| 0.8500                       | 0.235  | 0.215  | 0.147  | 0.051  | 0.031  | -0.001 | -0.009 | 0.017  | 0.060  | 0.072  | 0.044  | 0.025  | -0.001 | -0.017 | -0.007 | 0.061  |
| 0.9500                       | 0.140  | 0.237  | 0.187  | 0.026  | 0.040  | -0.029 | -0.036 | -0.016 | 0.097  | 0.097  | 0.069  | 0.040  | 0.009  | -0.014 | -0.008 | 0.060  |
| M = 0.698 $\alpha = 12.01$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 0.0500                       | -0.125 | -0.367 | -0.339 | -0.179 | 0.006  | -0.103 | -0.121 | -0.104 | -0.308 | -0.432 | -0.430 | -0.272 | -0.227 | -0.102 | -0.076 | -0.034 |
| 0.1500                       | -0.140 | -0.331 | -0.339 | -0.206 | -0.086 | -0.109 | -0.123 | -0.145 | -0.258 | -0.360 | -0.408 | -0.284 | -0.230 | -0.149 | -0.088 | -0.002 |
| 0.2500                       | -0.146 | -0.259 | -0.305 | -0.197 | -0.125 | -0.113 | -0.130 | -0.155 | -0.232 | -0.296 | -0.350 | -0.278 |        |        | -0.102 | -0.017 |
| 0.3500                       | -0.100 | -0.266 | -0.309 | -0.224 | -0.120 | -0.105 | -0.122 | -0.133 | -0.181 | -0.277 | -0.340 | -0.294 | -0.158 | -0.072 | -0.067 | -0.002 |
| 0.4500                       | -0.137 | -0.395 | -0.358 | -0.293 | -0.054 | -0.096 | -0.105 | -0.103 | -0.197 | -0.322 | -0.390 | -0.304 | -0.177 | -0.037 | -0.037 | 0.025  |
| 0.5500                       | -0.132 | 0.183  | 0.150  | -0.080 | -0.025 | -0.091 | -0.104 | -0.093 | 0.105  | 0.115  | 0.093  | 0.051  | 0.005  | -0.015 | -0.014 | 0.040  |
| 0.6500                       | 0.031  | 0.124  | 0.128  | -0.012 | -0.033 | -0.075 | -0.073 | -0.070 | 0.040  | 0.046  | 0.076  | 0.089  | 0.027  | -0.003 | -0.003 | 0.049  |
| 0.7500                       | 0.214  | 0.240  | 0.177  | 0.022  | 0.034  | -0.031 | 0.026  | 0.039  | 0.075  | 0.104  | 0.091  | 0.058  | 0.016  | -0.017 | -0.019 | 0.7500 |
| 0.8500                       | 0.263  | 0.290  | 0.239  | 0.096  | 0.060  | 0.032  | 0.027  | 0.050  | 0.105  | 0.140  | 0.119  | 0.072  | 0.024  | -0.028 | -0.031 | 0.049  |
| 0.9500                       | 0.161  | 0.315  | 0.270  | 0.080  | 0.033  | -0.041 | -0.062 | -0.048 | 0.165  | 0.204  | 0.139  | 0.092  | 0.023  | -0.057 | -0.052 | 0.033  |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT 5.3° SIDESLIP - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Continued

| $\frac{\theta}{2\pi}$     | Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        | $\frac{\theta}{2\pi}$ |
|---------------------------|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
|                           | 0.050                        | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  |                       |
|                           | $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 0.700      Q = 15.87  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | -0.255                       | -0.741 | -0.632 | -0.370 | -0.045 | -0.118 | -0.152 | -0.161 | -0.490 | -0.614 | -0.558 | -0.309 | -0.385 | -0.150 | -0.084 | -0.074                |
| 0.1500                    | -0.258                       | -0.464 | -0.467 | -0.264 | -0.078 | -0.136 | -0.181 | -0.203 | -0.320 | -0.438 | -0.509 | -0.330 | -0.347 | -0.221 | -0.128 | -0.042                |
| 0.2500                    | -0.144                       | -0.362 | -0.435 | -0.242 | -0.137 | -0.140 | -0.169 | -0.201 | -0.280 | -0.407 | -0.476 | -0.349 | -0.347 | -0.221 | -0.128 | -0.042                |
| 0.3500                    | -0.123                       | -0.421 | -0.440 | -0.268 | -0.145 | -0.135 | -0.141 | -0.157 | -0.246 | -0.382 | -0.459 | -0.381 | -0.173 | -0.095 | -0.154 | -0.051                |
| 0.4500                    | -0.206                       | -0.725 | -0.616 | -0.361 | -0.074 | -0.093 | -0.113 | -0.112 | -0.308 | -0.484 | -0.513 | -0.394 | -0.202 | -0.071 | -0.086 | -0.024                |
| 0.5500                    | -0.221                       | 0.280  | 0.279  | 0.074  | 0.035  | -0.011 | -0.045 | -0.075 | -0.069 | 0.055  | 0.115  | 0.141  | 0.112  | 0.061  | 0.002  | -0.016                |
| 0.6500                    | 0.075                        | 0.253  | 0.190  | 0.059  | -0.017 | -0.039 | -0.044 | -0.057 | -0.062 | 0.057  | 0.160  | 0.176  | 0.132  | 0.074  | -0.049 | -0.036                |
| 0.7500                    | 0.370                        | 0.346  | 0.287  | 0.125  | 0.080  | 0.089  | 0.062  | 0.076  | 0.076  | 0.097  | 0.141  | 0.160  | 0.177  | 0.123  | 0.059  | -0.008                |
| 0.8500                    | 0.365                        | 0.379  | 0.330  | 0.176  | 0.111  | 0.076  | 0.076  | 0.097  | 0.164  | 0.209  | 0.213  | 0.152  | 0.065  | -0.017 | -0.031 | 0.042                 |
| 0.9500                    | 0.135                        | 0.397  | 0.381  | 0.118  | 0.010  | -0.072 | -0.064 | -0.069 | 0.215  | 0.277  | 0.227  | 0.158  | 0.072  | -0.039 | -0.055 | 0.022                 |
| M = 1.304      Q = -03.90 |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.209                        | 0.210  | 0.198  | 0.136  | 0.069  | 0.059  | 0.026  | 0.020  | 0.108  | 0.057  | 0.018  | 0.002  | -0.037 | -0.086 | -0.101 | -0.080                |
| 0.1500                    | 0.217                        | 0.174  | 0.157  | 0.119  | 0.029  | 0.065  | 0.020  | 0.017  | 0.039  | 0.030  | 0.024  | -0.018 | -0.059 | -0.075 | -0.074 | 0.1500                |
| 0.2500                    | 0.168                        | 0.122  | 0.114  | 0.086  | 0.048  | 0.007  | -0.001 | -0.009 | -0.022 | -0.008 | 0.014  | -0.010 | -0.007 | -0.004 | -0.040 | -0.062                |
| 0.3500                    | 0.102                        | 0.085  | 0.090  | 0.053  | -0.013 | -0.006 | -0.034 | -0.031 | -0.027 | 0.001  | 0.014  | -0.010 | -0.009 | 0.034  | -0.022 | -0.016                |
| 0.4500                    | 0.066                        | 0.099  | 0.099  | 0.068  | -0.049 | -0.007 | -0.021 | -0.019 | 0.066  | 0.021  | 0.011  | 0.014  | -0.012 | -0.014 | -0.006 | 0.4500                |
| 0.5500                    | 0.064                        | 0.038  | -0.008 | -0.034 | -0.026 | -0.010 | -0.012 | -0.018 | 0.032  | -0.024 | -0.063 | -0.101 | -0.116 | -0.074 | -0.032 | 0.5500                |
| 0.6500                    | 0.064                        | 0.011  | -0.018 | -0.025 | -0.086 | 0.000  | 0.001  | -0.020 | -0.015 | 0.014  | -0.053 | -0.100 | -0.122 | -0.115 | -0.061 | 0.6500                |
| 0.7500                    | 0.069                        | 0.008  | -0.013 | -0.033 | -0.061 | -0.024 | 0.001  | -0.033 | -0.042 | -0.023 | -0.054 | -0.106 | -0.123 | -0.140 | -0.103 | 0.7500                |
| 0.8500                    | 0.094                        | 0.020  | 0.032  | -0.018 | -0.082 | -0.003 | -0.021 | -0.029 | -0.033 | -0.028 | -0.071 | -0.111 | -0.127 | -0.151 | -0.111 | -0.060                |
| 0.9500                    | 0.150                        | 0.064  | 0.087  | 0.026  | 0.051  | 0.041  | 0.014  | 0.012  | 0.034  | -0.058 | -0.093 | -0.123 | -0.149 | -0.150 | -0.102 | -0.053                |
| M = 1.301      Q = 00.15  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.186                        | 0.133  | 0.114  | 0.054  | 0.055  | 0.060  | 0.012  | 0.017  | 0.083  | 0.022  | -0.025 | -0.032 | -0.098 | -0.148 | -0.123 | -0.094                |
| 0.1500                    | 0.148                        | 0.093  | 0.074  | 0.037  | 0.027  | -0.011 | -0.004 | -0.001 | 0.004  | -0.033 | -0.033 | -0.044 | -0.086 | -0.129 | -0.124 | -0.095                |
| 0.2500                    | 0.102                        | 0.052  | 0.045  | 0.012  | -0.017 | -0.027 | -0.035 | -0.027 | -0.035 | -0.020 | -0.035 | -0.055 | -0.055 | -0.118 | -0.057 | 0.2500                |
| 0.3500                    | 0.072                        | 0.039  | 0.037  | -0.007 | -0.066 | -0.016 | -0.022 | -0.024 | -0.017 | -0.011 | -0.025 | -0.054 | -0.064 | -0.013 | -0.093 | -0.034                |
| 0.4500                    | 0.067                        | 0.046  | 0.032  | -0.011 | -0.047 | -0.001 | -0.023 | -0.014 | 0.045  | -0.011 | -0.025 | -0.049 | -0.081 | -0.045 | -0.059 | -0.016                |
| 0.5500                    | 0.074                        | 0.083  | 0.043  | 0.016  | -0.028 | -0.004 | -0.011 | -0.010 | 0.049  | -0.012 | -0.026 | -0.051 | -0.075 | -0.049 | -0.037 | -0.004                |
| 0.6500                    | 0.088                        | 0.051  | 0.035  | 0.020  | -0.062 | -0.022 | -0.012 | -0.026 | -0.017 | -0.002 | -0.027 | -0.053 | -0.072 | -0.064 | -0.049 | 0.6500                |
| 0.7500                    | 0.117                        | 0.059  | 0.036  | 0.026  | -0.018 | -0.049 | -0.011 | -0.026 | -0.030 | -0.007 | -0.029 | -0.061 | -0.077 | -0.100 | -0.069 | 0.7500                |
| 0.8500                    | 0.159                        | 0.095  | 0.069  | 0.051  | -0.045 | 0.021  | -0.002 | 0.002  | -0.009 | -0.010 | -0.032 | -0.062 | -0.081 | -0.101 | -0.105 | -0.085                |
| 0.9500                    | 0.187                        | 0.135  | 0.106  | 0.075  | 0.059  | 0.060  | 0.021  | 0.021  | 0.046  | -0.012 | -0.026 | -0.058 | -0.086 | -0.098 | -0.108 | -0.091                |
| M = 1.301      Q = 04.11  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.158                        | 0.057  | 0.053  | -0.012 | 0.026  | 0.035  | 0.001  | -0.003 | 0.054  | -0.040 | -0.098 | -0.085 | -0.157 | -0.201 | -0.124 | -0.085                |
| 0.1500                    | 0.093                        | 0.024  | -0.005 | -0.042 | -0.104 | -0.017 | -0.034 | -0.030 | -0.012 | -0.045 | -0.081 | -0.116 | -0.160 | -0.184 | -0.157 | -0.109                |
| 0.2500                    | 0.062                        | 0.004  | -0.018 | -0.045 | -0.085 | -0.075 | -0.028 | -0.041 | -0.039 | -0.032 | -0.077 | -0.104 | -0.130 | -0.130 | -0.061 | 0.2500                |
| 0.3500                    | 0.059                        | -0.001 | -0.017 | -0.042 | -0.085 | -0.075 | -0.028 | -0.041 | -0.039 | -0.032 | -0.077 | -0.104 | -0.130 | -0.130 | -0.061 | 0.3500                |
| 0.4500                    | 0.062                        | -0.010 | -0.031 | -0.073 | -0.065 | -0.020 | -0.039 | -0.022 | -0.016 | -0.020 | -0.065 | -0.105 | -0.160 | -0.055 | -0.097 | -0.047                |
| 0.5500                    | 0.064                        | 0.131  | 0.112  | 0.083  | -0.022 | -0.015 | -0.042 | -0.034 | 0.041  | -0.037 | -0.062 | -0.096 | -0.137 | -0.077 | -0.060 | -0.046                |
| 0.6500                    | 0.094                        | 0.083  | 0.090  | 0.064  | -0.016 | -0.013 | -0.042 | -0.038 | -0.033 | -0.003 | -0.011 | -0.044 | -0.121 | -0.053 | -0.039 | -0.030                |
| 0.7500                    | 0.155                        | 0.108  | 0.111  | 0.079  | 0.040  | -0.006 | -0.011 | -0.015 | -0.032 | -0.009 | -0.001 | -0.024 | -0.032 | -0.041 | -0.053 | 0.7500                |
| 0.8500                    | 0.209                        | 0.169  | 0.153  | 0.126  | 0.020  | 0.051  | 0.006  | 0.017  | -0.002 | 0.009  | 0.024  | -0.010 | -0.032 | -0.041 | -0.084 | -0.097                |
| 0.9500                    | 0.202                        | 0.212  | 0.190  | 0.156  | 0.075  | 0.042  | 0.001  | -0.001 | 0.069  | 0.027  | 0.029  | -0.001 | -0.028 | -0.040 | -0.116 | -0.105                |
| M = 1.304      Q = 08.01  |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                    | 0.096                        | 0.002  | -0.016 | -0.066 | -0.019 | 0.006  | -0.032 | -0.041 | -0.028 | -0.118 | -0.189 | -0.120 | -0.218 | -0.230 | -0.168 | -0.081                |
| 0.1500                    | 0.021                        | -0.043 | -0.070 | -0.094 | -0.147 | -0.043 | -0.059 | -0.050 | -0.046 | -0.102 | -0.159 | -0.184 | -0.210 | -0.214 | -0.178 | -0.035                |
| 0.2500                    | 0.016                        | -0.033 | -0.058 | -0.091 | -0.129 | -0.080 | -0.034 | -0.051 | -0.049 | -0.078 | -0.130 | -0.167 | -0.184 | -0.154 | -0.084 | 0.2500                |
| 0.3500                    | 0.019                        | -0.068 | -0.056 | -0.098 | -0.156 | -0.021 | -0.021 | -0.039 | -0.022 | -0.047 | -0.111 | -0.152 | -0.194 | -0.115 | -0.079 | -0.066                |
| 0.4500                    | 0.033                        | 0.206  | 0.184  | 0.160  | -0.008 | -0.025 | -0.069 | -0.034 | 0.004  | -0.068 | -0.117 | -0.160 | -0.184 | -0.082 | -0.030 | -0.048                |
| 0.5500                    | 0.118                        | 0.136  | 0.158  | 0.137  | 0.043  | -0.004 | -0.078 | -0.063 | 0.052  | 0.030  | 0.025  | 0.037  | 0.065  | -0.020 | 0.005  | -0.009                |
| 0.6500                    | 0.228                        | 0.192  | 0.193  | 0.165  | 0.120  | 0.045  | -0.003 | -0.018 | 0.053  | 0.053  | 0.057  | 0.066  | 0.046  | 0.007  | -0.017 | 0.6500                |
| 0.7500                    | 0.271                        | 0.257  | 0.240  | 0.222  | 0.100  | 0.072  | 0.026  | 0.026  | 0.004  | 0.062  | 0.074  | 0.062  | 0.036  | 0.033  | 0.003  | 0.7500                |
| 0.8500                    | 0.200                        | 0.286  | 0.276  | 0.238  | 0.082  | 0.006  | -0.011 | -0.022 | 0.110  | 0.103  | 0.094  | 0.078  | 0.059  | 0.018  | -0.093 | -0.121                |
| 0.9500                    |                              |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 0.9500                |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT  $5.3^\circ$  SIDESLIP - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Continued

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| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
|                              | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 1.302      Q = 12.16     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.025  | -0.086 | -0.124 | -0.146 | -0.054 | -0.073 | -0.101 | -0.087 | -0.087 | -0.216 | -0.225 | -0.234 | -0.261 | -0.192 | -0.097 | -0.073 | 0.0500                |
| 0.1500                       | -0.033 | -0.111 | -0.142 | -0.155 | -0.179 | -0.072 | -0.093 | -0.080 | -0.089 | -0.183 | -0.227 | -0.233 | -0.260 | -0.196 | -0.150 | -0.010 | 0.1500                |
| 0.2500                       | -0.014 | -0.070 | -0.099 | -0.154 | -0.170 | -0.070 | -0.045 | -0.073 | -0.079 | -0.130 | -0.204 | -0.225 | -0.225 | -0.179 | -0.116 | -0.055 | 0.2500                |
| 0.3500                       | 0.015  | -0.076 | -0.105 | -0.162 | -0.190 | -0.004 | -0.036 | -0.063 | -0.054 | -0.077 | -0.178 | -0.212 | -0.256 | -0.107 | -0.075 | -0.028 | 0.3500                |
| 0.4500                       | -0.019 | -0.176 | -0.148 | -0.177 | -0.074 | -0.086 | -0.083 | -0.060 | -0.038 | -0.126 | -0.178 | -0.223 | -0.251 | -0.107 | -0.024 | 0.024  | 0.4500                |
| 0.5500                       | -0.005 | 0.271  | 0.271  | 0.245  | 0.007  | -0.038 | -0.135 | -0.082 | 0.052  | 0.084  | 0.126  | 0.157  | 0.149  | 0.023  | 0.016  | 0.043  | 0.5500                |
| 0.6500                       | 0.152  | 0.197  | 0.245  | 0.233  | 0.094  | -0.001 | -0.065 | -0.114 | -0.054 | 0.029  | 0.143  | 0.148  | 0.134  | 0.101  | 0.043  | 0.006  | 0.6500                |
| 0.7500                       | 0.315  | 0.281  | 0.303  | 0.269  | 0.195  | 0.100  | 0.041  | 0.036  | -0.007 | 0.041  | 0.147  | 0.151  | 0.135  | 0.122  | 0.051  |        | 0.7500                |
| 0.8500                       | 0.339  | 0.347  | 0.355  | 0.317  | 0.181  | 0.101  | 0.019  | 0.053  | 0.022  | 0.145  | 0.172  | 0.166  | 0.153  | 0.122  | 0.022  | -0.044 | 0.8500                |
| 0.9500                       | 0.198  | 0.395  | 0.393  | 0.312  | 0.095  | -0.025 | -0.021 | -0.060 | 0.152  | 0.162  | 0.207  | 0.181  | 0.160  | 0.107  | -0.073 | -0.116 | 0.9500                |
| M = 1.302      Q = 16.12     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.081 | -0.267 | -0.324 | -0.359 | -0.137 | -0.129 | -0.132 | -0.133 | -0.189 | -0.270 | -0.302 | -0.300 | -0.325 | -0.201 | -0.126 | -0.050 | 0.0500                |
| 0.1500                       | -0.101 | -0.184 | -0.193 | -0.178 | -0.218 | -0.112 | -0.161 | -0.109 | -0.117 | -0.196 | -0.273 | -0.284 | -0.302 | -0.205 | -0.119 | 0.020  | 0.1500                |
| 0.2500                       | 0.006  | -0.089 | -0.149 | -0.198 | -0.207 | -0.103 | -0.075 | -0.071 | -0.114 | -0.151 | -0.237 | -0.278 |        |        | -0.095 | -0.013 | 0.2500                |
| 0.3500                       | 0.007  | -0.115 | -0.157 | -0.201 | -0.232 | -0.010 | -0.103 | -0.060 | -0.069 | -0.133 | -0.228 | -0.276 | -0.308 | -0.201 | -0.044 | 0.019  | 0.3500                |
| 0.4500                       | -0.089 | -0.273 | -0.280 | -0.256 | -0.117 | -0.095 | -0.130 | -0.078 | -0.083 | -0.220 | -0.246 | -0.286 | -0.307 | -0.092 | 0.010  | 0.037  | 0.4500                |
| 0.5500                       | -0.072 | 0.282  | 0.352  | 0.330  | 0.015  | -0.081 | -0.222 | -0.176 | 0.122  | 0.162  | 0.203  | 0.238  | 0.207  | 0.134  | 0.033  |        | 0.5500                |
| 0.6500                       | 0.185  | 0.264  | 0.336  | 0.336  | 0.147  | 0.021  | -0.021 | -0.023 | 0.126  | 0.038  | 0.233  | 0.244  | 0.239  | 0.242  | 0.100  | -0.021 | 0.6500                |
| 0.7500                       | 0.397  | 0.379  | 0.412  | 0.385  | 0.278  | 0.171  | 0.091  | 0.062  | 0.066  | 0.056  | 0.254  | 0.247  | 0.231  | 0.245  | 0.139  |        | 0.7500                |
| 0.8500                       | 0.394  | 0.444  | 0.467  | 0.417  | 0.289  | 0.111  | 0.034  | 0.058  | 0.060  | 0.163  | 0.288  | 0.280  | 0.236  | 0.244  | 0.082  | -0.019 | 0.8500                |
| 0.9500                       | 0.170  | 0.488  | 0.493  | 0.389  | 0.087  | -0.090 | -0.162 | -0.101 | 0.173  | 0.243  | 0.312  | 0.287  | 0.255  | 0.213  | -0.049 | -0.086 | 0.9500                |
| M = 2.229      Q = -03.65    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.185  | 0.177  | 0.168  | 0.118  | 0.039  | 0.061  | 0.046  | 0.036  | 0.071  | 0.035  | 0.020  | -0.001 | -0.019 | -0.012 | -0.026 | -0.047 | 0.0500                |
| 0.1500                       | 0.195  | 0.142  | 0.131  | 0.092  | 0.082  | 0.047  | 0.046  | 0.037  | 0.034  | 0.024  | 0.017  | 0.017  | -0.009 | -0.007 | -0.021 | -0.039 | 0.1500                |
| 0.2500                       | 0.143  | 0.093  | 0.082  | 0.067  | 0.052  | 0.037  | 0.024  | 0.011  | 0.000  | -0.011 | -0.020 | 0.001  |        |        | -0.027 | -0.034 | 0.2500                |
| 0.3500                       | 0.088  | 0.049  | 0.047  | 0.042  | 0.032  | 0.013  | -0.010 | -0.019 | -0.017 | -0.030 | -0.001 | 0.006  | 0.038  | 0.003  | -0.025 | -0.015 | 0.3500                |
| 0.4500                       | 0.052  | 0.061  | 0.076  | 0.048  | -0.014 | -0.007 | -0.006 | -0.020 | 0.019  | 0.013  | 0.003  | 0.006  | -0.008 | -0.011 | -0.014 | -0.005 | 0.4500                |
| 0.5500                       | 0.042  | 0.099  | -0.002 | -0.013 | -0.038 | -0.003 | -0.003 | -0.013 | 0.016  | -0.009 | -0.027 | -0.031 | -0.045 | -0.042 | -0.022 | -0.020 | 0.5500                |
| 0.6500                       | 0.041  | 0.015  | 0.007  | -0.012 | -0.018 | -0.036 | -0.023 | -0.012 | -0.010 | -0.017 | -0.036 | -0.051 | -0.059 | -0.054 | -0.030 |        | 0.6500                |
| 0.7500                       | 0.048  | 0.020  | 0.012  | -0.008 | -0.023 | -0.031 | -0.036 | -0.031 | -0.022 | -0.015 | -0.016 | -0.039 | -0.050 | -0.059 | -0.071 |        | 0.7500                |
| 0.8500                       | 0.083  | 0.044  | 0.028  | 0.006  | -0.012 | -0.014 | -0.006 | -0.018 | -0.016 | -0.022 | -0.033 | -0.043 | -0.055 | -0.061 | -0.071 | -0.057 | 0.8500                |
| 0.9500                       | 0.138  | 0.083  | 0.073  | 0.033  | 0.000  | 0.040  | 0.034  | 0.020  | 0.033  | -0.011 | -0.041 | -0.054 | -0.058 | -0.067 | -0.044 | -0.058 | 0.9500                |
| M = 2.233      Q = 00.35     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.167  | 0.125  | 0.107  | 0.060  | 0.003  | 0.050  | 0.045  | 0.031  | 0.053  | 0.028  | -0.006 | -0.020 | -0.029 | -0.038 | -0.042 | -0.057 | 0.0500                |
| 0.1500                       | 0.136  | 0.087  | 0.069  | 0.036  | 0.025  | 0.002  | 0.014  | 0.007  | -0.002 | 0.004  | -0.018 | -0.030 | -0.040 | -0.046 | -0.046 | -0.063 | 0.1500                |
| 0.2500                       | 0.085  | 0.005  | -0.008 | -0.019 | 0.009  | -0.010 | -0.023 | -0.021 | -0.025 | -0.028 | -0.028 | -0.032 |        |        | -0.055 | -0.055 | 0.2500                |
| 0.3500                       | 0.059  | 0.026  | 0.017  | 0.000  | -0.009 | -0.022 | -0.023 | -0.021 | -0.019 | -0.018 | -0.020 | -0.026 | 0.001  | -0.049 | -0.053 | -0.034 | 0.3500                |
| 0.4500                       | 0.049  | 0.032  | 0.026  | 0.002  | -0.047 | -0.006 | -0.007 | -0.016 | 0.009  | -0.008 | -0.011 | -0.020 | -0.039 | -0.047 | -0.040 | -0.021 | 0.4500                |
| 0.5500                       | 0.048  | 0.126  | 0.040  | 0.014  | -0.037 | -0.003 | -0.007 | -0.016 | 0.026  | 0.001  | -0.013 | -0.018 | -0.064 | -0.038 | -0.028 | -0.023 | 0.5500                |
| 0.6500                       | 0.058  | 0.034  | 0.023  | 0.014  | 0.003  | -0.017 | -0.027 | -0.023 | -0.015 | -0.008 | -0.010 | -0.022 | -0.031 | -0.036 | -0.041 | -0.029 | 0.6500                |
| 0.7500                       | 0.090  | 0.049  | 0.038  | 0.026  | 0.010  | -0.002 | -0.013 | -0.019 | -0.018 | -0.018 | -0.012 | -0.028 | -0.035 | -0.042 | -0.055 |        | 0.7500                |
| 0.8500                       | 0.138  | 0.091  | 0.078  | 0.048  | 0.037  | 0.011  | 0.011  | 0.007  | 0.001  | 0.000  | -0.012 | -0.029 | -0.041 | -0.046 | -0.058 |        | 0.8500                |
| 0.9500                       | 0.169  | 0.137  | 0.114  | 0.080  | 0.005  | 0.050  | 0.038  | 0.029  | 0.044  | 0.019  | -0.011 | -0.025 | -0.033 | -0.046 | -0.040 | -0.051 | 0.9500                |
| M = 2.232      Q = 04.31     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.135  | 0.065  | 0.060  | 0.015  | -0.020 | 0.044  | 0.032  | 0.017  | 0.009  | -0.009 | -0.069 | -0.066 | -0.078 | -0.071 | -0.051 | -0.066 | 0.0500                |
| 0.1500                       | 0.085  | 0.032  | 0.013  | -0.008 | -0.019 | -0.027 | -0.012 | -0.026 | -0.038 | -0.032 | -0.072 | -0.069 | -0.083 | -0.076 | -0.074 | -0.069 | 0.1500                |
| 0.2500                       | 0.041  | 0.011  | -0.003 | -0.023 | -0.035 | -0.046 | -0.044 | -0.041 | -0.036 | -0.039 | -0.054 | -0.053 | -0.069 | -0.075 | -0.079 | -0.065 | 0.2500                |
| 0.3500                       | 0.034  | 0.003  | -0.008 | -0.030 | -0.039 | -0.046 | -0.046 | -0.041 | -0.016 | -0.025 | -0.035 | -0.053 | -0.076 | -0.075 | -0.079 | -0.046 | 0.3500                |
| 0.4500                       | 0.035  | -0.013 | -0.018 | -0.032 | -0.064 | -0.011 | -0.007 | -0.021 | -0.006 | -0.033 | -0.036 | -0.048 | -0.069 | -0.075 | -0.051 | -0.018 | 0.4500                |
| 0.5500                       | 0.046  | 0.143  | 0.093  | 0.064  | -0.012 | -0.004 | -0.009 | -0.027 | 0.023  | 0.015  | -0.008 | -0.013 | -0.024 | -0.013 | -0.026 | -0.018 | 0.5500                |
| 0.6500                       | 0.085  | 0.050  | 0.058  | 0.050  | 0.047  | 0.018  | -0.016 | -0.025 | -0.026 | -0.036 | 0.001  | -0.002 | -0.005 | -0.006 | -0.019 | -0.028 | 0.6500                |
| 0.7500                       | 0.147  | 0.098  | 0.089  | 0.074  | 0.060  | 0.046  | 0.027  | 0.011  | -0.007 | -0.017 | -0.003 | -0.005 | -0.016 | -0.013 | -0.030 |        | 0.7500                |
| 0.8500                       | 0.192  | 0.151  | 0.145  | 0.107  | 0.093  | 0.054  | 0.043  | 0.032  | 0.020  | 0.023  | 0.024  | 0.001  | -0.009 | -0.015 | -0.028 | -0.040 | 0.8500                |
| 0.9500                       | 0.186  | 0.193  | 0.191  | 0.131  | 0.046  | 0.055  | 0.039  | 0.026  | 0.062  | 0.060  | 0.042  | 0.013  | 0.002  | -0.007 | -0.037 | -0.050 | 0.9500                |







TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT  $5.3^\circ$  SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.7^\circ$

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| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 0.700 $\alpha = -04.00$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.133  | 0.181  | 0.010  | -0.048 | -0.010 | -0.010 | -0.018 | -0.016 | 0.113  | 0.033  | -0.037 | -0.045 | -0.094 | -0.042 | -0.021 | 0.030  | 0.0500                |
| 0.1500                       | 0.134  | 0.049  | 0.011  | -0.022 | -0.010 | -0.004 | -0.010 | 0.006  | 0.032  | 0.019  | -0.009 | -0.025 | -0.065 | -0.018 | -0.018 | 0.058  | 0.1500                |
| 0.2500                       | 0.098  | 0.018  | -0.028 | -0.043 | -0.033 | -0.028 | -0.030 | -0.033 | -0.014 | -0.023 | -0.032 | -0.048 | -0.059 | -0.040 | -0.016 | 0.058  | 0.2500                |
| 0.3500                       | 0.036  | -0.037 | -0.057 | -0.115 | -0.099 | -0.074 | -0.083 | -0.069 | -0.021 | -0.025 | -0.038 | -0.046 | -0.061 | -0.021 | -0.010 | 0.058  | 0.3500                |
| 0.4500                       | -0.005 | 0.015  | -0.123 | -0.175 | -0.097 | -0.095 | -0.097 | -0.076 | 0.074  | 0.025  | -0.032 | -0.039 | -0.037 | -0.009 | 0.010  | 0.057  | 0.4500                |
| 0.5500                       | -0.007 | 0.022  | -0.040 | -0.238 | -0.085 | -0.095 | -0.081 | -0.065 | -0.123 | -0.198 | -0.162 | -0.136 | -0.099 | -0.002 | 0.012  | 0.057  | 0.5500                |
| 0.6500                       | -0.006 | -0.006 | -0.018 | -0.126 | -0.053 | -0.080 | -0.074 | -0.065 | -0.108 | -0.154 | -0.185 | -0.166 | -0.115 | -0.034 | -0.006 | 0.047  | 0.6500                |
| 0.7500                       | -0.005 | -0.017 | -0.038 | -0.088 | -0.066 | -0.073 | -0.092 | -0.087 | -0.100 | -0.143 | -0.170 | -0.169 | -0.129 | -0.048 | -0.013 | 0.041  | 0.7500                |
| 0.8500                       | 0.007  | -0.004 | -0.042 | -0.102 | -0.066 | -0.097 | -0.097 | -0.095 | -0.120 | -0.167 | -0.199 | -0.179 | -0.149 | -0.059 | -0.030 | 0.041  | 0.8500                |
| 0.9500                       | 0.076  | 0.058  | -0.017 | -0.165 | -0.024 | -0.079 | -0.088 | -0.081 | -0.166 | -0.181 | -0.181 | -0.181 | -0.134 | -0.040 | -0.020 | 0.047  | 0.9500                |
| M = 0.698 $\alpha = 00.00$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.117  | 0.283  | -0.026 | -0.067 | -0.029 | -0.010 | -0.020 | 0.011  | 0.098  | -0.035 | -0.101 | -0.101 | -0.136 | -0.066 | -0.039 | 0.039  | 0.0500                |
| 0.1500                       | 0.071  | -0.078 | -0.146 | -0.080 | -0.018 | -0.022 | -0.018 | -0.023 | -0.002 | -0.048 | -0.100 | -0.114 | -0.139 | -0.044 | -0.038 | 0.038  | 0.1500                |
| 0.2500                       | 0.033  | -0.085 | -0.131 | -0.082 | -0.082 | -0.061 | -0.066 | -0.069 | -0.033 | -0.074 | -0.103 | -0.119 | -0.126 | -0.072 | -0.034 | 0.039  | 0.2500                |
| 0.3500                       | 0.007  | -0.116 | -0.160 | -0.135 | -0.109 | -0.076 | -0.085 | -0.078 | -0.052 | -0.061 | -0.096 | -0.112 | -0.111 | -0.052 | -0.017 | 0.038  | 0.3500                |
| 0.4500                       | -0.001 | 0.134  | -0.202 | -0.204 | -0.100 | -0.089 | -0.091 | -0.076 | 0.031  | -0.011 | -0.090 | -0.102 | -0.093 | -0.029 | -0.008 | 0.038  | 0.4500                |
| 0.5500                       | -0.001 | 0.090  | 0.029  | -0.257 | -0.126 | -0.095 | -0.103 | -0.072 | -0.088 | -0.155 | -0.128 | -0.113 | -0.087 | -0.020 | -0.006 | 0.039  | 0.5500                |
| 0.6500                       | 0.009  | 0.054  | 0.050  | -0.153 | -0.026 | -0.065 | -0.086 | -0.071 | -0.087 | -0.127 | -0.136 | -0.120 | -0.099 | -0.043 | -0.015 | 0.040  | 0.6500                |
| 0.7500                       | 0.026  | 0.038  | 0.034  | 0.055  | -0.055 | -0.069 | -0.083 | -0.079 | -0.086 | -0.120 | -0.130 | -0.124 | -0.110 | -0.053 | -0.027 | 0.039  | 0.7500                |
| 0.8500                       | 0.076  | 0.087  | 0.037  | 0.056  | -0.035 | -0.074 | -0.085 | -0.074 | -0.094 | -0.117 | -0.134 | -0.141 | -0.173 | -0.083 | -0.056 | 0.019  | 0.8500                |
| 0.9500                       | 0.109  | 0.169  | 0.062  | -0.173 | -0.028 | -0.069 | -0.086 | -0.083 | -0.148 | -0.122 | -0.082 | -0.089 | -0.092 | -0.037 | -0.028 | 0.044  | 0.9500                |
| M = 0.697 $\alpha = 03.91$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.062  | 0.303  | -0.210 | -0.085 | -0.037 | -0.038 | -0.028 | -0.021 | 0.153  | -0.063 | -0.192 | -0.162 | -0.188 | -0.091 | -0.057 | 0.007  | 0.0500                |
| 0.1500                       | -0.012 | -0.340 | -0.160 | -0.176 | -0.032 | -0.030 | -0.046 | -0.064 | -0.030 | -0.127 | -0.184 | -0.191 | -0.187 | -0.060 | -0.015 | 0.015  | 0.1500                |
| 0.2500                       | -0.033 | -0.222 | -0.230 | -0.189 | -0.104 | -0.081 | -0.087 | -0.098 | -0.059 | -0.119 | -0.164 | -0.179 | -0.172 | -0.103 | -0.058 | 0.020  | 0.2500                |
| 0.3500                       | -0.038 | -0.219 | -0.258 | -0.195 | -0.122 | -0.095 | -0.107 | -0.100 | -0.077 | -0.076 | -0.132 | -0.174 | -0.152 | -0.088 | -0.049 | 0.023  | 0.3500                |
| 0.4500                       | -0.032 | 0.215  | -0.246 | -0.276 | -0.121 | -0.102 | -0.096 | -0.096 | 0.004  | -0.031 | -0.130 | -0.166 | -0.145 | -0.058 | -0.029 | 0.025  | 0.4500                |
| 0.5500                       | -0.025 | 0.147  | 0.139  | -0.305 | -0.134 | -0.118 | -0.108 | -0.088 | -0.074 | -0.150 | -0.123 | -0.104 | -0.102 | -0.045 | -0.018 | 0.029  | 0.5500                |
| 0.6500                       | 0.002  | 0.084  | 0.099  | -0.052 | -0.046 | -0.089 | -0.100 | -0.087 | -0.092 | -0.128 | -0.119 | -0.077 | -0.065 | -0.048 | -0.021 | 0.030  | 0.6500                |
| 0.7500                       | 0.028  | 0.088  | 0.086  | -0.021 | -0.040 | -0.071 | -0.087 | -0.088 | -0.088 | -0.106 | -0.102 | -0.091 | -0.084 | -0.067 | -0.042 | 0.030  | 0.7500                |
| 0.8500                       | 0.144  | 0.162  | 0.115  | -0.014 | -0.030 | -0.067 | -0.078 | -0.068 | -0.081 | -0.094 | -0.064 | -0.077 | -0.080 | -0.062 | -0.047 | 0.027  | 0.8500                |
| 0.9500                       | 0.150  | 0.238  | 0.191  | -0.217 | -0.045 | -0.083 | -0.077 | -0.061 | -0.199 | -0.173 | -0.051 | -0.065 | -0.074 | -0.057 | -0.041 | 0.024  | 0.9500                |
| M = 0.699 $\alpha = 07.96$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.010 | 0.432  | -0.489 | -0.314 | -0.120 | -0.080 | -0.101 | -0.169 | -0.192 | -0.367 | -0.404 | -0.234 | -0.151 | -0.062 | -0.042 | 0.013  | 0.0500                |
| 0.1500                       | -0.070 | -0.640 | -0.374 | -0.128 | -0.034 | -0.056 | -0.060 | -0.126 | -0.176 | -0.248 | -0.295 | -0.223 | -0.154 | -0.059 | -0.017 | 0.017  | 0.1500                |
| 0.2500                       | -0.086 | -0.317 | -0.342 | -0.205 | -0.101 | -0.091 | -0.113 | -0.134 | -0.162 | -0.194 | -0.240 | -0.211 | -0.151 | -0.095 | -0.060 | 0.015  | 0.2500                |
| 0.3500                       | -0.069 | -0.343 | -0.348 | -0.245 | -0.147 | -0.113 | -0.111 | -0.121 | -0.129 | -0.173 | -0.230 | -0.214 | -0.135 | -0.074 | -0.044 | 0.017  | 0.3500                |
| 0.4500                       | -0.057 | 0.340  | -0.448 | -0.374 | -0.130 | -0.105 | -0.099 | -0.095 | -0.099 | -0.151 | -0.236 | -0.211 | -0.104 | -0.050 | -0.031 | 0.021  | 0.4500                |
| 0.5500                       | -0.059 | 0.221  | 0.258  | -0.375 | -0.163 | -0.125 | -0.087 | -0.076 | -0.036 | -0.053 | -0.006 | -0.030 | -0.041 | -0.032 | -0.021 | 0.023  | 0.5500                |
| 0.6500                       | 0.031  | 0.123  | 0.170  | 0.005  | -0.045 | -0.081 | -0.094 | -0.079 | -0.056 | -0.046 | -0.026 | -0.030 | -0.051 | -0.042 | -0.024 | 0.028  | 0.6500                |
| 0.7500                       | 0.148  | 0.190  | 0.167  | 0.028  | -0.018 | -0.045 | -0.061 | -0.045 | -0.038 | -0.023 | -0.018 | -0.033 | -0.048 | -0.058 | -0.036 | 0.030  | 0.7500                |
| 0.8500                       | 0.198  | 0.250  | 0.186  | 0.046  | -0.009 | -0.037 | -0.044 | -0.027 | -0.016 | 0.016  | 0.013  | -0.024 | -0.038 | -0.049 | -0.038 | 0.035  | 0.8500                |
| 0.9500                       | 0.183  | 0.322  | 0.258  | -0.298 | -0.022 | -0.098 | -0.079 | -0.052 | -0.044 | 0.082  | 0.030  | -0.001 | -0.032 | -0.040 | -0.031 | 0.037  | 0.9500                |
| M = 0.699 $\alpha = 11.96$   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.107 | 0.477  | -0.984 | -0.684 | -0.409 | -0.199 | -0.196 | -0.151 | -0.275 | -0.439 | -0.466 | -0.240 | -0.186 | -0.138 | -0.111 | -0.065 | 0.0500                |
| 0.1500                       | -0.153 | -0.900 | -0.334 | -0.178 | -0.064 | -0.064 | -0.119 | -0.155 | -0.263 | -0.366 | -0.455 | -0.332 | -0.292 | -0.151 | -0.051 | 0.015  | 0.1500                |
| 0.2500                       | -0.116 | -0.395 | -0.395 | -0.241 | -0.139 | -0.119 | -0.125 | -0.159 | -0.218 | -0.277 | -0.372 | -0.316 | -0.216 | -0.166 | -0.128 | -0.056 | 0.2500                |
| 0.3500                       | -0.088 | -0.517 | -0.492 | -0.296 | -0.183 | -0.128 | -0.131 | -0.141 | -0.179 | -0.250 | -0.326 | -0.281 | -0.188 | -0.105 | -0.085 | -0.011 | 0.3500                |
| 0.4500                       | -0.112 | 0.426  | -0.700 | -0.516 | -0.208 | -0.121 | -0.123 | -0.096 | -0.135 | -0.244 | -0.351 | -0.293 | -0.159 | -0.053 | -0.054 | 0.001  | 0.4500                |
| 0.5500                       | -0.122 | 0.236  | 0.354  | -0.441 | -0.176 | -0.081 | -0.107 | -0.081 | 0.035  | 0.077  | -0.026 | 0.064  | -0.095 | -0.014 | -0.039 | 0.015  | 0.5500                |
| 0.6500                       | 0.058  | 0.186  | 0.230  | 0.064  | -0.085 | -0.068 | -0.080 | -0.067 | -0.016 | 0.017  | 0.067  | 0.041  | 0.001  | -0.024 | -0.021 | 0.031  | 0.6500                |
| 0.7500                       | 0.278  | 0.277  | 0.264  | 0.095  | 0.003  | -0.013 | -0.016 | 0.005  | 0.058  | 0.072  | 0.071  | 0.041  | 0.002  | -0.040 | -0.039 | 0.028  | 0.7500                |
| 0.8500                       | 0.299  | 0.349  | 0.316  | 0.096  | -0.014 | -0.012 | -0.002 | 0.030  | 0.076  | 0.111  | 0.113  | 0.065  | 0.013  | -0.047 | -0.050 | 0.028  | 0.8500                |
| 0.9500                       | 0.118  | 0.388  | 0.417  | -0.407 | -0.201 | -0.071 | -0.083 | -0.082 | 0.117  | 0.175  | 0.123  | 0.077  | 0.016  | -0.071 | -0.075 | 0.011  | 0.9500                |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT  $5.3^\circ$  SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.7^\circ$  - Continued

| Fraction of body length, $x/l$    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$             | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
| $C_p$                             | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| $M = 0.698 \quad \alpha = 16.02$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                            | -0.214 | 0.561  | -0.921 | -0.643 | -0.498 | -0.255 | -0.203 | -0.192 | -0.489 | -0.646 | -0.592 | -0.338 | -0.296 | -0.188 | -0.156 | -0.089 | 0.0500                |
| 0.1500                            | -0.196 | -0.709 | -0.591 | -0.366 | -0.253 | -0.148 | -0.169 | -0.259 | -0.398 | -0.518 | -0.569 | -0.391 | -0.326 | -0.191 | -0.083 | 0.1500 |                       |
| 0.2500                            | -0.070 | -0.515 | -0.507 | -0.279 | -0.168 | -0.108 | -0.140 | -0.209 | -0.287 | -0.383 | -0.459 | -0.343 | -0.289 | -0.278 | -0.212 | -0.134 | 0.2500                |
| 0.3500                            | -0.075 | -1.251 | -0.670 | -0.349 | -0.249 | -0.128 | -0.132 | -0.166 | -0.245 | -0.353 | -0.442 | -0.359 | -0.230 | -0.214 | -0.124 | -0.056 | 0.3500                |
| 0.4500                            | -0.189 | 0.515  | -1.103 | -0.817 | -0.291 | -0.104 | -0.073 | -0.066 | -0.211 | -0.374 | -0.475 | -0.363 | -0.200 | -0.101 | -0.066 | -0.037 | 0.4500                |
| 0.5500                            | -0.193 | 0.267  | 0.457  | -0.472 | -0.199 | -0.103 | -0.105 | -0.079 | 0.149  | 0.197  | 0.187  | 0.139  | 0.068  | -0.036 | -0.033 | -0.006 | 0.5500                |
| 0.6500                            | 0.095  | 0.217  | 0.303  | 0.122  | -0.046 | -0.046 | -0.054 | -0.031 | 0.056  | 0.100  | 0.152  | 0.110  | 0.071  | -0.006 | -0.024 | 0.030  | 0.6500                |
| 0.7500                            | 0.396  | 0.375  | 0.368  | 0.162  | 0.043  | 0.059  | 0.072  | 0.080  | 0.147  | 0.166  | 0.178  | 0.118  | 0.057  | -0.021 | 0.037  | 0.118  | 0.7500                |
| 0.8500                            | 0.382  | 0.422  | 0.428  | 0.155  | -0.066 | -0.028 | 0.026  | 0.084  | 0.171  | 0.210  | 0.204  | 0.140  | 0.070  | -0.041 | 0.030  | 0.080  | 0.8500                |
| 0.9500                            | 0.073  | 0.458  | 0.493  | -0.362 | -0.567 | -0.224 | -0.146 | -0.130 | 0.244  | 0.261  | 0.228  | 0.156  | 0.068  | -0.110 | -0.101 | -0.021 | 0.9500                |
| $M = 1.300 \quad \alpha = -03.81$ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                            | 0.204  | 0.268  | 0.119  | 0.063  | -0.069 | 0.094  | 0.042  | 0.028  | 0.182  | 0.104  | 0.054  | 0.040  | -0.024 | -0.083 | -0.097 | -0.077 | 0.0500                |
| 0.1500                            | 0.212  | 0.125  | 0.098  | 0.075  | 0.049  | 0.079  | 0.038  | 0.042  | 0.036  | 0.081  | 0.049  | 0.037  | -0.011 | -0.077 | -0.075 | 0.1500 |                       |
| 0.2500                            | 0.161  | 0.096  | 0.068  | 0.042  | 0.013  | -0.018 | -0.019 | 0.008  | 0.013  | 0.012  | 0.038  | 0.009  | -0.020 | -0.008 | -0.040 | -0.042 | 0.2500                |
| 0.3500                            | 0.102  | 0.046  | 0.012  | -0.027 | -0.046 | -0.101 | -0.020 | -0.027 | -0.023 | 0.037  | 0.049  | 0.023  | -0.014 | 0.027  | -0.021 | -0.011 | 0.3500                |
| 0.4500                            | 0.065  | 0.085  | -0.054 | -0.057 | -0.154 | 0.007  | -0.036 | -0.064 | 0.033  | 0.074  | 0.051  | 0.027  | -0.013 | 0.019  | -0.012 | -0.014 | 0.4500                |
| 0.5500                            | 0.058  | 0.082  | 0.080  | -0.047 | -0.091 | -0.045 | -0.031 | -0.028 | 0.042  | -0.077 | -0.068 | -0.106 | -0.119 | -0.088 | -0.019 | -0.013 | 0.5500                |
| 0.6500                            | 0.061  | 0.043  | 0.070  | 0.059  | -0.065 | 0.017  | -0.009 | -0.029 | -0.007 | -0.037 | -0.084 | -0.104 | -0.119 | -0.123 | -0.064 | -0.003 | 0.6500                |
| 0.7500                            | 0.063  | 0.030  | 0.058  | 0.034  | -0.051 | 0.000  | -0.018 | -0.043 | 0.033  | -0.033 | -0.072 | -0.114 | -0.125 | -0.140 | -0.094 | 0.7500 |                       |
| 0.8500                            | 0.091  | 0.053  | 0.070  | 0.021  | -0.006 | -0.021 | -0.026 | -0.053 | -0.043 | -0.062 | -0.099 | -0.131 | -0.146 | -0.160 | -0.118 | -0.045 | 0.8500                |
| 0.9500                            | 0.148  | 0.140  | 0.116  | 0.018  | 0.036  | 0.013  | -0.021 | -0.021 | -0.038 | -0.106 | -0.072 | -0.093 | -0.126 | -0.139 | -0.099 | -0.081 | 0.9500                |
| $M = 1.302 \quad \alpha = 00.10$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                            | 0.176  | 0.365  | 0.063  | 0.008  | -0.079 | 0.091  | 0.031  | 0.032  | 0.184  | 0.058  | -0.068 | -0.015 | -0.085 | -0.151 | -0.122 | -0.103 | 0.0500                |
| 0.1500                            | 0.140  | 0.036  | -0.011 | 0.009  | -0.008 | 0.066  | 0.014  | 0.013  | 0.014  | 0.030  | -0.034 | -0.036 | -0.082 | -0.120 | -0.120 | -0.102 | 0.1500                |
| 0.2500                            | 0.093  | 0.029  | -0.005 | -0.031 | -0.048 | -0.076 | -0.012 | -0.018 | -0.037 | -0.015 | -0.025 | -0.050 | -0.085 | -0.095 | -0.100 | -0.059 | 0.2500                |
| 0.3500                            | 0.067  | -0.001 | -0.047 | -0.077 | -0.093 | -0.104 | -0.010 | -0.031 | -0.037 | 0.014  | -0.015 | -0.046 | -0.090 | -0.053 | -0.066 | -0.027 | 0.3500                |
| 0.4500                            | 0.059  | 0.158  | -0.153 | -0.101 | -0.168 | 0.026  | -0.036 | -0.032 | 0.017  | 0.050  | 0.014  | -0.048 | -0.080 | -0.056 | -0.044 | -0.024 | 0.4500                |
| 0.5500                            | 0.063  | 0.110  | 0.169  | -0.050 | -0.176 | -0.038 | -0.054 | -0.044 | 0.019  | -0.069 | -0.090 | -0.066 | -0.077 | -0.050 | -0.036 | -0.004 | 0.5500                |
| 0.6500                            | 0.077  | 0.081  | 0.143  | 0.129  | -0.032 | 0.003  | -0.032 | -0.030 | -0.018 | -0.075 | -0.083 | -0.074 | -0.082 | -0.083 | -0.059 | 0.6500 |                       |
| 0.7500                            | 0.109  | 0.072  | 0.081  | 0.109  | -0.010 | -0.013 | -0.043 | -0.040 | -0.047 | -0.041 | -0.081 | -0.087 | -0.091 | -0.107 | -0.087 | 0.7500 |                       |
| 0.8500                            | 0.151  | 0.135  | 0.123  | 0.102  | 0.019  | -0.013 | -0.024 | -0.025 | -0.040 | -0.048 | -0.060 | -0.090 | -0.127 | -0.137 | -0.121 | -0.099 | 0.8500                |
| 0.9500                            | 0.179  | 0.241  | 0.176  | -0.003 | -0.023 | 0.020  | -0.031 | -0.034 | -0.057 | -0.065 | -0.020 | -0.049 | -0.075 | -0.077 | -0.108 | -0.108 | 0.9500                |
| $M = 1.302 \quad \alpha = 04.01$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                            | 0.157  | 0.482  | -0.032 | -0.058 | -0.094 | 0.074  | 0.048  | 0.003  | 0.211  | 0.097  | -0.131 | -0.075 | -0.142 | -0.187 | -0.129 | -0.084 | 0.0500                |
| 0.1500                            | 0.094  | -0.043 | -0.103 | -0.068 | -0.061 | 0.054  | -0.005 | -0.005 | 0.025  | 0.014  | -0.103 | -0.098 | -0.128 | -0.155 | -0.081 | 0.1500 |                       |
| 0.2500                            | 0.062  | -0.010 | -0.066 | -0.078 | -0.116 | -0.112 | -0.006 | -0.030 | -0.039 | 0.000  | -0.063 | -0.075 | -0.137 | -0.141 | -0.138 | -0.037 | 0.2500                |
| 0.3500                            | 0.059  | -0.020 | -0.103 | -0.113 | -0.125 | -0.114 | -0.008 | -0.032 | -0.041 | 0.020  | -0.007 | -0.076 | -0.138 | -0.101 | -0.096 | -0.030 | 0.3500                |
| 0.4500                            | 0.061  | 0.295  | -0.114 | -0.144 | -0.194 | 0.036  | -0.040 | -0.050 | 0.053  | 0.029  | -0.028 | -0.087 | -0.140 | -0.097 | -0.051 | -0.014 | 0.4500                |
| 0.5500                            | 0.061  | 0.143  | 0.281  | -0.056 | -0.154 | -0.054 | -0.086 | -0.052 | 0.014  | -0.035 | -0.080 | -0.017 | -0.017 | -0.019 | 0.030  | 0.009  | 0.5500                |
| 0.6500                            | 0.094  | 0.098  | 0.245  | 0.202  | 0.018  | 0.009  | -0.089 | -0.041 | -0.038 | -0.045 | -0.080 | -0.032 | -0.009 | -0.016 | -0.028 | -0.015 | 0.6500                |
| 0.7500                            | 0.154  | 0.117  | 0.189  | 0.185  | 0.049  | 0.013  | -0.046 | -0.041 | -0.036 | -0.044 | -0.036 | -0.059 | -0.024 | -0.037 | -0.052 | 0.7500 |                       |
| 0.8500                            | 0.210  | 0.217  | 0.223  | 0.196  | 0.067  | 0.011  | -0.018 | -0.019 | -0.021 | -0.059 | 0.023  | -0.016 | -0.027 | -0.025 | -0.086 | -0.083 | 0.8500                |
| 0.9500                            | 0.206  | 0.382  | 0.292  | -0.010 | -0.049 | -0.013 | -0.029 | 0.002  | -0.035 | -0.147 | 0.041  | -0.006 | -0.051 | -0.045 | -0.105 | -0.103 | 0.9500                |
| $M = 1.301 \quad \alpha = 08.06$  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                            | 0.097  | 0.596  | -0.253 | -0.132 | -0.143 | 0.044  | -0.072 | -0.060 | 0.002  | -0.143 | -0.176 | -0.085 | -0.196 | -0.232 | -0.124 | -0.037 | 0.0500                |
| 0.1500                            | 0.023  | -0.162 | -0.049 | -0.088 | -0.102 | 0.042  | -0.033 | -0.063 | -0.088 | -0.170 | -0.199 | -0.227 | -0.191 | -0.191 | -0.100 | 0.1500 |                       |
| 0.2500                            | 0.018  | -0.026 | -0.118 | -0.133 | -0.140 | -0.109 | -0.006 | -0.029 | -0.079 | -0.075 | -0.097 | -0.178 | -0.192 | -0.143 | -0.095 | -0.040 | 0.2500                |
| 0.3500                            | 0.031  | -0.034 | -0.182 | -0.140 | -0.157 | -0.130 | -0.016 | -0.029 | -0.070 | -0.032 | -0.089 | -0.140 | -0.184 | -0.033 | -0.049 | -0.050 | 0.3500                |
| 0.4500                            | 0.023  | 0.475  | -0.223 | -0.208 | -0.219 | 0.046  | -0.045 | -0.065 | -0.022 | 0.029  | -0.029 | -0.079 | -0.150 | -0.179 | 0.007  | -0.007 | 0.4500                |
| 0.5500                            | 0.035  | 0.244  | 0.357  | -0.030 | -0.144 | -0.060 | -0.091 | -0.009 | 0.024  | -0.011 | 0.031  | 0.080  | 0.023  | 0.045  | 0.034  | 0.010  | 0.5500                |
| 0.6500                            | 0.120  | 0.122  | 0.341  | 0.297  | 0.070  | -0.060 | -0.126 | -0.059 | -0.031 | -0.011 | 0.024  | 0.056  | 0.068  | 0.058  | 0.043  | 0.013  | 0.6500                |
| 0.7500                            | 0.230  | 0.194  | 0.317  | 0.292  | 0.124  | 0.020  | -0.029 | -0.038 | 0.027  | 0.001  | 0.046  | 0.048  | 0.060  | 0.037  | 0.014  | 0.7500 |                       |
| 0.8500                            | 0.274  | 0.308  | 0.345  | 0.300  | 0.125  | 0.023  | -0.016 | -0.001 | 0.001  | 0.043  | 0.060  | 0.055  | 0.067  | 0.040  | -0.023 | -0.066 | 0.8500                |
| 0.9500                            | 0.203  | 0.501  | 0.405  | 0.037  | 0.014  | -0.069 | -0.045 | -0.031 | 0.059  | 0.084  | 0.093  | 0.070  | 0.057  | 0.017  | -0.107 | -0.108 | 0.9500                |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT  $5.3^\circ$  SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.7^\circ$  - Continued

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| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990  | $\frac{\theta}{2\pi}$ |
|                              | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  |                       |
| M = 1.300 $Q = 12.06$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.033  | 0.719  | -0.408 | -0.241 | -0.254 | -0.085 | -0.085 | -0.115 | -0.073 | -0.154 | -0.195 | -0.112 | -0.264 | -0.171 | -0.151 | -0.049 | 0.0500                |
| 0.1500                       | -0.027 | -0.215 | -0.090 | -0.124 | -0.132 | 0.012  | -0.092 | -0.052 | -0.096 | -0.201 | -0.255 | -0.236 | -0.287 | -0.137 | -0.137 | 0.001  | 0.1500                |
| 0.2500                       | -0.009 | -0.042 | -0.179 | -0.169 | -0.171 | -0.082 | -0.052 | -0.061 | -0.106 | -0.147 | -0.200 | -0.225 | -0.236 | -0.250 | -0.091 | -0.124 | 0.2500                |
| 0.3500                       | 0.022  | -0.087 | -0.225 | -0.189 | -0.184 | -0.120 | -0.044 | -0.074 | -0.083 | -0.112 | -0.153 | -0.205 | -0.245 | -0.095 | 0.007  | -0.043 | 0.3500                |
| 0.4500                       | -0.014 | 0.622  | -0.282 | -0.353 | -0.346 | 0.041  | -0.106 | -0.037 | -0.004 | -0.095 | -0.149 | -0.207 | -0.237 | -0.024 | 0.033  | 0.014  | 0.4500                |
| 0.5500                       | -0.001 | 0.377  | 0.470  | -0.018 | -0.090 | -0.003 | -0.092 | -0.046 | 0.059  | -0.003 | 0.015  | 0.072  | 0.021  | 0.093  | 0.070  | 0.066  | 0.5500                |
| 0.6500                       | 0.155  | 0.156  | 0.438  | 0.380  | 0.136  | -0.077 | -0.107 | -0.082 | 0.010  | 0.040  | 0.117  | 0.154  | 0.145  | 0.144  | 0.093  | 0.037  | 0.6500                |
| 0.7500                       | 0.317  | 0.271  | 0.440  | 0.389  | 0.222  | 0.024  | -0.025 | 0.011  | 0.016  | 0.042  | 0.137  | 0.144  | 0.135  | 0.135  | 0.101  |        | 0.7500                |
| 0.8500                       | 0.342  | 0.397  | 0.449  | 0.391  | 0.188  | 0.026  | -0.023 | 0.027  | 0.019  | 0.123  | 0.190  | 0.172  | 0.165  | 0.140  | 0.044  | -0.010 | 0.8500                |
| 0.9500                       | 0.201  | 0.590  | 0.541  | 0.105  | -0.118 | -0.070 | 0.006  | -0.059 | 0.142  | 0.181  | 0.209  | 0.180  | 0.161  | 0.114  | -0.055 | -0.093 | 0.9500                |
| M = 1.299 $Q = 16.07$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | -0.081 | 0.843  | -0.507 | -0.551 | -0.356 | -0.306 | -0.145 | -0.181 | -0.118 | -0.173 | 0.032  | -0.308 | -0.340 | -0.190 | -0.103 | -0.041 | 0.0500                |
| 0.1500                       | -0.086 | -0.287 | -0.183 | -0.138 | -0.164 | -0.114 | -0.155 | -0.166 | -0.195 | -0.265 | -0.306 | -0.317 | -0.334 | -0.100 | 0.017  | 0.1500 |                       |
| 0.2500                       | 0.003  | -0.062 | -0.209 | -0.195 | -0.212 | -0.117 | -0.095 | -0.112 | -0.146 | -0.195 | -0.261 | -0.289 | -0.314 | -0.296 | -0.088 | -0.086 | 0.2500                |
| 0.3500                       | 0.008  | -0.150 | -0.443 | -0.249 | -0.209 | -0.073 | -0.119 | -0.107 | -0.087 | -0.126 | -0.240 | -0.284 | -0.315 | -0.138 | -0.011 | -0.016 | 0.3500                |
| 0.4500                       | -0.082 | 0.788  | -0.462 | -0.500 | -0.440 | -0.024 | -0.107 | -0.070 | -0.056 | -0.145 | -0.232 | -0.281 | -0.308 | -0.064 | 0.016  | 0.069  | 0.4500                |
| 0.5500                       | -0.075 | 0.449  | 0.580  | -0.016 | -0.206 | -0.080 | -0.147 | -0.083 | 0.026  | -0.004 | -0.065 | 0.230  | 0.245  | 0.128  | 0.074  | 0.092  | 0.5500                |
| 0.6500                       | 0.178  | 0.251  | 0.547  | 0.433  | 0.208  | -0.131 | -0.139 | -0.141 | -0.029 | 0.078  | 0.193  | 0.223  | 0.228  | 0.247  | 0.110  |        | 0.6500                |
| 0.7500                       | 0.395  | 0.380  | 0.557  | 0.458  | 0.322  | 0.066  | 0.013  | 0.032  | 0.010  | 0.056  | 0.221  | 0.227  | 0.224  | 0.262  | 0.129  |        | 0.7500                |
| 0.8500                       | 0.391  | 0.509  | 0.620  | 0.458  | 0.234  | -0.050 | -0.034 | 0.063  | 0.032  | 0.147  | 0.253  | 0.256  | 0.247  | 0.269  | 0.078  | 0.026  | 0.8500                |
| 0.9500                       | 0.161  | 0.667  | 0.672  | 0.153  | -0.310 | -0.081 | -0.065 | -0.106 | 0.140  | 0.201  | 0.285  | 0.274  | 0.245  | 0.219  | -0.037 | -0.036 | 0.9500                |
| M = 2.227 $Q = -03.56$       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.186  | 0.316  | 0.111  | 0.066  | 0.051  | 0.012  | 0.074  | 0.054  | 0.086  | 0.101  | 0.031  | 0.018  | -0.005 | -0.001 | -0.060 | -0.043 | 0.0500                |
| 0.1500                       | 0.192  | 0.114  | 0.096  | 0.075  | 0.062  | 0.049  | 0.035  | 0.048  | 0.044  | 0.038  | 0.024  | 0.005  | -0.012 |        | -0.013 | -0.036 | 0.1500                |
| 0.2500                       | 0.142  | 0.092  | 0.070  | 0.043  | 0.030  | 0.020  | 0.010  | -0.001 | 0.006  | -0.018 | -0.015 | 0.007  | -0.012 | -0.008 | -0.025 | -0.029 | 0.2500                |
| 0.3500                       | 0.087  | 0.045  | 0.019  | 0.001  | -0.020 | -0.024 | -0.026 | -0.043 | -0.033 | -0.023 | 0.018  | 0.022  | -0.002 | -0.008 | -0.020 | -0.005 | 0.3500                |
| 0.4500                       | 0.053  | 0.094  | -0.025 | -0.047 | -0.047 | -0.056 | -0.028 | -0.014 | 0.005  | 0.030  | 0.022  | 0.018  | -0.001 | -0.012 | -0.007 | -0.002 | 0.4500                |
| 0.5500                       | 0.042  | 0.114  | 0.064  | -0.037 | -0.057 | -0.028 | -0.016 | -0.024 | 0.016  | -0.035 | -0.045 | -0.050 | -0.058 | -0.051 | -0.029 | -0.019 | 0.5500                |
| 0.6500                       | 0.042  | 0.021  | 0.029  | 0.045  | 0.016  | -0.004 | -0.008 | -0.012 | 0.006  | -0.029 | -0.029 | -0.051 | -0.058 | -0.065 | -0.064 | -0.050 | 0.6500                |
| 0.7500                       | 0.050  | 0.020  | 0.017  | 0.023  | 0.013  | -0.005 | -0.015 | -0.024 | -0.015 | -0.027 | -0.024 | -0.053 | -0.061 | -0.063 | -0.080 |        | 0.7500                |
| 0.8500                       | 0.083  | 0.047  | 0.066  | 0.008  | -0.027 | -0.007 | -0.006 | -0.021 | -0.021 | -0.031 | -0.055 | -0.060 | -0.070 | -0.076 | -0.084 | -0.074 | 0.8500                |
| 0.9500                       | 0.138  | 0.112  | 0.131  | 0.028  | -0.008 | 0.029  | 0.010  | -0.007 | -0.034 | -0.036 | -0.047 | -0.045 | -0.064 | -0.038 | -0.051 |        | 0.9500                |
| M = 2.231 $Q = 00.40$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.165  | 0.428  | 0.031  | 0.036  | 0.024  | -0.005 | 0.090  | 0.047  | 0.046  | 0.066  | -0.015 | -0.032 | -0.042 | -0.035 | -0.038 | -0.057 | 0.0500                |
| 0.1500                       | 0.138  | 0.055  | 0.035  | 0.022  | 0.026  | 0.014  | 0.000  | 0.027  | 0.011  | 0.006  | -0.023 | -0.035 | -0.049 |        | -0.042 | -0.057 | 0.1500                |
| 0.2500                       | 0.087  | 0.048  | 0.025  | -0.009 | -0.018 | -0.028 | -0.032 | -0.026 | -0.039 | -0.024 | -0.026 | -0.042 | -0.049 | -0.041 | -0.054 | -0.053 | 0.2500                |
| 0.3500                       | 0.061  | 0.021  | -0.007 | -0.030 | -0.044 | -0.043 | -0.043 | -0.033 | -0.013 | -0.017 | -0.002 | -0.015 | -0.038 | -0.040 | -0.055 | -0.029 | 0.3500                |
| 0.4500                       | 0.050  | 0.180  | -0.055 | -0.060 | -0.064 | -0.038 | 0.002  | -0.009 | 0.011  | -0.005 | 0.006  | -0.003 | -0.033 | -0.044 | -0.036 | -0.019 | 0.4500                |
| 0.5500                       | 0.049  | 0.135  | 0.147  | -0.031 | -0.077 | -0.017 | -0.007 | -0.028 | -0.001 | -0.018 | -0.045 | -0.039 | -0.037 | -0.039 | -0.030 | -0.023 | 0.5500                |
| 0.6500                       | 0.060  | 0.036  | 0.048  | 0.091  | 0.058  | 0.017  | 0.003  | -0.012 | -0.026 | -0.021 | -0.032 | -0.055 | -0.043 | -0.046 | -0.046 | -0.033 | 0.6500                |
| 0.7500                       | 0.092  | 0.051  | 0.046  | 0.074  | 0.061  | 0.032  | 0.009  | -0.011 | -0.024 | -0.030 | -0.030 | -0.046 | -0.054 | -0.048 | -0.062 |        | 0.7500                |
| 0.8500                       | 0.138  | 0.092  | 0.119  | 0.067  | 0.022  | 0.031  | 0.016  | -0.005 | -0.006 | -0.008 | -0.026 | -0.041 | -0.054 | -0.065 | -0.079 | -0.083 | 0.8500                |
| 0.9500                       | 0.170  | 0.165  | 0.208  | 0.016  | 0.007  | 0.059  | 0.018  |        | 0.009  | -0.031 | 0.006  | -0.028 | -0.034 | -0.039 | -0.047 | -0.047 | 0.9500                |
| M = 2.231 $Q = 04.26$        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.137  | 0.532  | -0.041 | -0.002 | -0.002 | -0.013 | 0.075  | 0.023  | 0.021  | 0.045  | -0.069 | -0.072 | -0.082 | -0.068 | -0.047 | -0.064 | 0.0500                |
| 0.1500                       | 0.087  | -0.007 | -0.037 | 0.001  | -0.012 | -0.020 | 0.013  | -0.007 | -0.029 | -0.045 | -0.063 | -0.064 | -0.079 |        | -0.077 | -0.070 | 0.1500                |
| 0.2500                       | 0.045  | 0.013  | -0.012 | -0.035 | -0.047 | -0.051 | -0.054 | -0.045 | -0.046 | -0.038 | -0.036 | -0.049 | -0.065 | -0.065 | -0.081 | -0.052 | 0.2500                |
| 0.3500                       | 0.037  | 0.002  | -0.031 | -0.056 | -0.063 | -0.059 | -0.049 | -0.018 | -0.017 | -0.020 | -0.013 | -0.029 | -0.062 | -0.069 | -0.074 | -0.039 | 0.3500                |
| 0.4500                       | 0.038  | 0.301  | -0.060 | -0.079 | -0.080 | -0.035 | 0.012  | -0.010 | 0.002  | -0.023 | -0.009 | -0.026 | -0.059 | -0.074 | -0.033 | -0.022 | 0.4500                |
| 0.5500                       | 0.046  | 0.141  | 0.195  | 0.000  | -0.080 | -0.021 | -0.018 | -0.035 | 0.001  | -0.001 | -0.027 | -0.028 | -0.013 | -0.013 | -0.020 | -0.010 | 0.5500                |
| 0.6500                       | 0.087  | 0.044  | 0.084  | 0.156  | 0.111  | 0.032  | 0.003  | -0.021 | -0.041 | -0.046 | -0.018 | -0.038 | -0.023 | -0.009 | -0.020 | -0.017 | 0.6500                |
| 0.7500                       | 0.148  | 0.100  | 0.101  | 0.123  | 0.079  | 0.038  | 0.008  | -0.008 | -0.020 | -0.025 | -0.016 | -0.029 | -0.033 | 0.036  |        |        | 0.7500                |
| 0.8500                       | 0.194  | 0.147  | 0.157  | 0.139  | 0.083  | 0.066  | 0.045  | 0.013  | 0.021  | 0.013  | -0.003 | 0.009  | -0.006 | -0.021 | -0.036 | -0.048 | 0.8500                |
| 0.9500                       | 0.188  | 0.203  | 0.334  | 0.032  | 0.045  | 0.078  | 0.022  | 0.011  | 0.040  | -0.018 | 0.042  | 0.026  | 0.006  | -0.008 | -0.037 | -0.051 | 0.9500                |



TABLE V.- PRESSURE COEFFICIENTS FOR THE BODY WITH THE MODEL AT  $5.3^\circ$  SIDESLIP - Concluded  
(c) BVWC;  $\delta = 10.7^\circ$  - Concluded

| Fraction of body length, x/l |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| $\frac{\theta}{2\pi}$        | 0.050  | 0.100  | 0.135  | 0.209  | 0.250  | 0.300  | 0.350  | 0.400  | 0.450  | 0.500  | 0.595  | 0.705  | 0.800  | 0.900  | 0.950  | 0.990                 |
| $\frac{\theta}{2\pi}$        | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $C_p$  | $\frac{\theta}{2\pi}$ |
| M = 2.243 Q = 08.31          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.097  | 0.669  | -0.119 | -0.018 | -0.023 | 0.121  | 0.011  | -0.025 | 0.003  | -0.078 | -0.103 | -0.104 | -0.107 | -0.092 | -0.079 | -0.084                |
| 0.1500                       | 0.037  | -0.077 | -0.040 | -0.023 | -0.035 | -0.047 | -0.004 | -0.044 | -0.046 | -0.066 | -0.098 | -0.102 | -0.126 | -0.087 | -0.077 | 0.1500                |
| 0.2500                       | 0.014  | -0.013 | -0.035 | -0.070 | -0.071 | -0.072 | -0.068 | -0.059 | -0.047 | -0.048 | -0.067 | -0.071 | -0.102 | -0.091 | -0.107 | -0.083                |
| 0.3500                       | 0.017  | -0.021 | -0.050 | -0.080 | -0.075 | -0.073 | -0.033 | -0.017 | -0.018 | -0.035 | -0.045 | -0.069 | -0.102 | -0.096 | -0.089 | -0.062                |
| 0.4500                       | 0.013  | 0.434  | -0.111 | -0.086 | -0.106 | -0.020 | -0.004 | -0.024 | -0.017 | -0.040 | -0.057 | -0.069 | -0.092 | -0.096 | -0.053 | -0.038                |
| 0.5500                       | 0.036  | 0.147  | 0.148  | 0.056  | -0.032 | 0.018  | -0.009 | -0.042 | -0.009 | -0.005 | -0.007 | -0.025 | 0.013  | 0.003  | -0.011 | -0.014                |
| 0.6500                       | 0.122  | 0.072  | 0.130  | 0.240  | 0.173  | 0.054  | 0.001  | -0.020 | -0.037 | -0.062 | -0.008 | 0.013  | 0.026  | 0.033  | 0.017  | -0.014                |
| 0.7500                       | 0.217  | 0.162  | 0.168  | 0.202  | 0.202  | 0.139  | 0.076  | 0.041  | 0.014  | -0.011 | -0.001 | 0.008  | 0.012  | 0.019  | 0.010  | 0.7500                |
| 0.8500                       | 0.252  | 0.198  | 0.232  | 0.229  | 0.167  | 0.078  | 0.079  | 0.031  | 0.019  | 0.034  | 0.067  | 0.050  | 0.034  | 0.026  | 0.015  | -0.006                |
| 0.9500                       | 0.195  | 0.240  | 0.453  | 0.114  | 0.004  | 0.081  | -0.009 | 0.056  | 0.089  | 0.092  | 0.068  | 0.049  | 0.036  | -0.034 | -0.039 | 0.9500                |
| M = 2.235 Q = 12.36          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.054  | 0.787  | -0.158 | -0.050 | -0.059 | -0.086 | -0.068 | -0.056 | -0.063 | -0.135 | -0.138 | -0.126 | -0.113 | -0.116 | -0.087 | -0.090                |
| 0.1500                       | -0.012 | -0.140 | -0.064 | -0.053 | -0.063 | -0.067 | -0.052 | -0.084 | -0.083 | -0.111 | -0.138 | -0.122 | -0.132 | -0.099 | -0.099 | -0.096                |
| 0.2500                       | -0.013 | -0.032 | -0.053 | -0.090 | -0.089 | -0.087 | -0.068 | -0.053 | -0.063 | -0.069 | -0.113 | -0.110 | -0.133 | -0.119 | -0.131 | -0.075                |
| 0.3500                       | -0.012 | -0.038 | -0.073 | -0.092 | -0.092 | -0.085 | -0.028 | -0.032 | -0.048 | -0.056 | -0.090 | -0.108 | -0.133 | -0.122 | -0.097 | -0.075                |
| 0.4500                       | -0.024 | 0.565  | -0.155 | -0.136 | -0.124 | 0.011  | -0.042 | -0.061 | -0.042 | -0.090 | -0.090 | -0.106 | -0.126 | -0.116 | -0.086 | -0.053                |
| 0.5500                       | 0.017  | 0.153  | 0.251  | 0.059  | -0.051 | -0.014 | -0.018 | -0.063 | -0.038 | -0.016 | -0.026 | 0.019  | 0.010  | 0.061  | 0.003  | -0.013                |
| 0.6500                       | 0.164  | 0.110  | 0.187  | 0.334  | 0.250  | 0.105  | 0.026  | -0.015 | -0.036 | -0.055 | -0.003 | 0.057  | 0.077  | 0.084  | 0.062  | 0.008                 |
| 0.7500                       | 0.292  | 0.235  | 0.234  | 0.292  | 0.280  | 0.207  | 0.129  | 0.091  | 0.055  | 0.035  | 0.010  | 0.055  | 0.068  | 0.074  | 0.065  | 0.7500                |
| 0.8500                       | 0.312  | 0.251  | 0.327  | 0.319  | 0.255  | 0.133  | 0.090  | 0.064  | 0.042  | 0.026  | 0.087  | 0.110  | 0.084  | 0.078  | 0.081  | 0.041                 |
| 0.9500                       | 0.204  | 0.266  | 0.538  | 0.205  | -0.058 | 0.050  | -0.023 | -0.055 | 0.066  | 0.115  | 0.144  | 0.132  | 0.112  | 0.091  | -0.015 | -0.025                |
| M = 2.235 Q = 16.42          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                       |
| 0.0500                       | 0.008  | 0.918  | -0.182 | -0.140 | -0.115 | -0.132 | -0.089 | -0.111 | -0.106 | -0.143 | -0.152 | -0.141 | -0.154 | -0.086 | -0.098 | -0.102                |
| 0.1500                       | -0.048 | -0.175 | -0.127 | -0.090 | -0.092 | -0.065 | -0.104 | -0.119 | -0.114 | -0.126 | -0.148 | -0.138 | -0.152 | -0.114 | -0.116 | -0.1500               |
| 0.2500                       | -0.061 | -0.047 | -0.067 | -0.102 | -0.101 | -0.099 | -0.059 | -0.062 | -0.094 | -0.096 | -0.128 | -0.129 | -0.152 | -0.138 | -0.153 | -0.076                |
| 0.3500                       | -0.061 | -0.058 | -0.093 | -0.110 | -0.101 | -0.080 | -0.043 | -0.053 | -0.071 | -0.076 | -0.112 | -0.126 | -0.152 | -0.138 | -0.109 | -0.110                |
| 0.4500                       | 0.012  | 0.697  | -0.181 | -0.171 | -0.153 | 0.011  | -0.064 | -0.095 | -0.103 | -0.144 | -0.111 | -0.123 | -0.145 | -0.129 | -0.087 | -0.063                |
| 0.5500                       | 0.012  | 0.163  | 0.291  | 0.072  | -0.090 | -0.084 | -0.114 | -0.132 | -0.093 | -0.087 | 0.009  | 0.024  | 0.037  | 0.123  | 0.008  | -0.025                |
| 0.6500                       | 0.222  | 0.159  | 0.265  | 0.432  | 0.338  | 0.155  | 0.077  | 0.031  | -0.016 | -0.010 | 0.019  | 0.111  | 0.121  | 0.156  | 0.089  | 0.034                 |
| 0.7500                       | 0.390  | 0.318  | 0.313  | 0.397  | 0.378  | 0.277  | 0.200  | 0.152  | 0.083  | 0.093  | 0.077  | 0.115  | 0.135  | 0.146  | 0.134  | 0.7500                |
| 0.8500                       | 0.384  | 0.313  | 0.407  | 0.423  | 0.336  | 0.205  | 0.140  | 0.093  | 0.083  | 0.078  | 0.154  | 0.165  | 0.144  | 0.151  | 0.131  | 0.8500                |
| 0.9500                       | 0.211  | 0.295  | 0.474  | 0.287  | -0.120 | -0.073 | -0.081 | -0.087 | -0.010 | 0.096  | 0.224  | 0.214  | 0.183  | 0.171  | 0.009  | -0.024                |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION  
(a) BVW

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.700      α = -04.15 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.260           | -0.484          | -0.743          | 0.245           | -0.607          | -0.852          | 0.243           | -0.684          | -0.928          |                 |                 |                 | 0.300           | -0.841          | -1.141          | 0.290           | -0.793          | -1.083          | 0.288           | -0.685          |                 | 0.0000 |
| 0.0125                    | 0.186           | -0.350          | -0.536          | 0.183           | -0.532          | -0.714          | 0.191           | -0.631          | -0.822          | 0.199           | -0.780          | -0.979          | 0.219           | -0.832          | -1.051          | 0.253           | -0.799          | -1.052          | 0.266           |                 |                 | 0.0125 |
| 0.0250                    | 0.131           | -0.262          | -0.393          | 0.136           | -0.452          | -0.588          | 0.148           | -0.554          | -0.702          | 0.155           | -0.427          | -0.582          | 0.161           | -0.758          | -0.919          | 0.219           | -0.802          | -1.022          | 0.243           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.674          |                 | 0.0420 |
| 0.0500                    | 0.076           | -0.223          | -0.299          | 0.087           | -0.283          | -0.370          | 0.091           | -0.326          | -0.417          |                 | -0.369          |                 | 0.114           | -0.410          | -0.524          | 0.161           | -0.805          | -0.966          | 0.199           |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.670          |                 | 0.0640 |
| 0.0750                    | 0.063           | -0.212          | -0.274          | 0.056           | -0.259          | -0.315          | 0.066           | -0.297          | -0.363          | 0.066           | -0.327          | -0.93           | 0.078           | -0.349          | -0.427          | 0.125           | -0.792          | -0.917          | 0.173           |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.669          |                 | 0.0810 |
| 0.1000                    | 0.042           | -0.208          | -0.250          | 0.039           | -0.249          | -0.288          | 0.045           | -0.276          | -0.321          | 0.045           | -0.302          | -0.348          | 0.055           | -0.325          | -0.380          | 0.103           | -0.765          | -0.868          | 0.156           | -0.669          | -0.824          | 0.1000 |
| 0.1500                    | 0.026           | -0.193          | -0.219          | 0.019           | -0.224          | -0.243          | 0.024           | -0.254          | -0.277          | 0.021           | -0.275          | -0.297          | 0.030           | -0.291          | -0.321          | 0.074           | -0.600          | -0.673          | 0.129           | -0.671          | -0.801          | 0.1500 |
| 0.2000                    | 0.011           | -0.193          | -0.205          | 0.011           | -0.211          | -0.222          | 0.017           | -0.217          | -0.234          | 0.013           | -0.273          | -0.291          | 0.018           | -0.273          | -0.291          | 0.059           | -0.415          | -0.474          | 0.107           | -0.671          | -0.778          | 0.2000 |
| 0.3000                    | -0.001          | -0.200          | -0.198          | -0.005          | -0.205          | -0.199          | -0.001          | -0.221          | -0.220          |                 |                 |                 | 0.006           | -0.243          | -0.250          | 0.050           | -0.240          | -0.290          | 0.075           | -0.689          | -0.764          | 0.3000 |
| 0.4000                    | -0.020          | -0.197          | -0.178          | -0.013          | -0.198          | -0.184          | -0.008          | -0.210          | -0.202          |                 |                 |                 | -0.002          | -0.214          | -0.212          | 0.069           | -0.221          | -0.290          | 0.052           | -0.684          | -0.736          | 0.4000 |
| 0.5000                    | -0.022          | -0.190          | -0.168          | -0.019          | -0.191          | -0.172          | -0.011          | -0.192          | -0.181          |                 |                 |                 | -0.001          | -0.195          | -0.193          | 0.061           | -0.192          | -0.254          | 0.042           | -0.627          | -0.669          | 0.5000 |
| 0.6000                    | -0.019          | -0.174          | -0.155          | -0.019          | -0.172          | -0.153          | -0.015          | -0.170          | -0.155          |                 |                 |                 | 0.000           | -0.170          | -0.171          | 0.044           | -0.171          | -0.215          | 0.028           | -0.520          | -0.548          | 0.6000 |
| 0.7000                    | -0.027          | -0.140          | -0.113          | -0.036          | -0.149          | -0.113          | -0.038          | -0.144          | -0.106          |                 |                 |                 | -0.073          | -0.142          | -0.069          | 0.026           | -0.135          | -0.160          | 0.016           | -0.366          | -0.382          | 0.7000 |
| 0.8000                    | -0.072          | -0.121          | -0.050          | -0.073          | -0.118          | -0.044          | -0.081          | -0.113          | -0.032          |                 |                 |                 | -0.114          | -0.108          | 0.006           | 0.014           | -0.101          | -0.115          | 0.009           | -0.196          | -0.204          | 0.8000 |
| 0.9000                    | -0.075          | -0.074          | 0.000           | -0.075          | -0.066          | 0.009           | -0.075          | -0.064          | 0.011           |                 |                 |                 | -0.080          | -0.055          | 0.025           | 0.017           | -0.052          | -0.069          | -0.017          | -0.064          | -0.047          | 0.9000 |
| 1.0000                    | -0.035          | 0.002           | 0.037           | -0.042          | 0.004           | 0.046           | -0.021          | 0.003           | 0.024           |                 |                 |                 | 0.027           | 0.015           | -0.012          | 0.033           | 0.011           | -0.022          | -0.061          | 0.029           | 0.090           | 1.0000 |
| M = 0.700      α = -00.05 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.040           | 0.006           | -0.034          | -0.027          | -0.022          | 0.005           | -0.033          | -0.017          | 0.016           |                 |                 |                 | -0.029          | -0.039          | -0.009          | -0.048          | -0.041          | 0.007           | 0.023           | -0.221          |                 | 0.0000 |
| 0.0125                    | -0.015          | -0.019          | -0.003          | -0.057          | -0.047          | 0.009           | -0.062          | -0.056          | 0.006           | -0.076          | -0.066          | 0.010           | -0.075          | -0.071          | 0.004           | -0.080          | -0.082          | -0.002          | -0.028          |                 |                 | 0.0125 |
| 0.0250                    | -0.054          | -0.039          | 0.015           | -0.077          | -0.066          | 0.011           | -0.084          | -0.083          | 0.000           | -0.100          | -0.092          | 0.008           | -0.105          | -0.093          | 0.011           | -0.104          | -0.112          | -0.008          | -0.064          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.158          |                 | 0.0420 |
| 0.0500                    | -0.079          | -0.067          | 0.011           | -0.087          | -0.084          | 0.003           | -0.104          | -0.099          | 0.004           |                 | -0.117          |                 | -0.118          | -0.111          | 0.007           | -0.122          | -0.135          | -0.013          | -0.089          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.146          |                 | 0.0640 |
| 0.0750                    | -0.076          | -0.077          | -0.001          | -0.097          | -0.093          | 0.004           | -0.106          | -0.105          | 0.000           | -0.125          | -0.122          | 0.003           | -0.126          | -0.117          | 0.009           | -0.136          | -0.134          | 0.001           | -0.093          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.146          |                 | 0.0810 |
| 0.1000                    | -0.088          | -0.082          | 0.006           | -0.100          | -0.100          | 0.000           | -0.113          | -0.109          | 0.005           | -0.129          | -0.122          | 0.008           | -0.132          | -0.121          | 0.011           | -0.135          | -0.137          | -0.001          | -0.093          | -0.141          | -0.048          | 0.1000 |
| 0.1500                    | -0.094          | -0.080          | 0.013           | -0.106          | -0.101          | 0.005           | -0.113          | -0.113          | 0.000           | -0.128          | -0.127          | 0.002           | -0.128          | -0.123          | 0.005           | -0.129          | -0.137          | -0.008          | -0.093          | -0.137          | -0.044          | 0.1500 |
| 0.2000                    | -0.091          | -0.085          | 0.006           | -0.103          | -0.103          |                 | -0.111          | -0.091          | 0.019           | -0.127          | -0.127          |                 | -0.124          | -0.123          | 0.001           | -0.122          | -0.134          | -0.012          | -0.090          | -0.140          | -0.050          | 0.2000 |
| 0.3000                    | -0.106          | -0.102          | 0.004           | -0.107          | -0.107          |                 | -0.117          | -0.119          | -0.002          |                 |                 |                 | -0.119          | -0.119          |                 | -0.093          | -0.132          | -0.038          | -0.082          | -0.135          | -0.052          | 0.3000 |
| 0.4000                    | -0.112          | -0.108          | 0.005           | -0.103          | -0.104          | -0.001          | -0.101          | -0.111          | -0.010          |                 |                 |                 | -0.108          | -0.114          | -0.006          | -0.053          | -0.126          | -0.073          | -0.076          | -0.125          | -0.049          | 0.4000 |
| 0.5000                    | -0.103          | -0.109          | -0.006          | -0.098          | -0.112          | -0.014          | -0.094          | -0.108          | -0.014          |                 |                 |                 | -0.094          | -0.109          | -0.015          | -0.011          | -0.112          | -0.101          | -0.064          | -0.111          | -0.047          | 0.5000 |
| 0.6000                    | -0.093          | -0.104          | -0.011          | -0.092          | -0.107          | -0.015          | -0.094          | -0.103          | -0.010          |                 |                 |                 | -0.083          | -0.099          | -0.016          | 0.006           | -0.105          | -0.111          | -0.053          | -0.098          | -0.045          | 0.6000 |
| 0.7000                    | -0.097          | -0.085          | 0.012           | -0.108          | -0.100          | 0.008           | -0.116          | -0.090          | 0.026           |                 |                 |                 | -0.176          | -0.091          | 0.086           | -0.002          | -0.088          | -0.085          | -0.043          | -0.079          | -0.036          | 0.7000 |
| 0.8000                    | -0.144          | -0.085          | 0.059           | -0.144          | -0.084          | 0.060           | -0.161          | -0.078          | 0.083           |                 |                 |                 | -0.211          | -0.070          | 0.141           | -0.003          | -0.065          | -0.062          | -0.026          | -0.062          | -0.037          | 0.8000 |
| 0.9000                    | -0.128          | -0.058          | 0.070           | -0.129          | -0.052          | 0.076           | -0.138          | -0.050          | 0.088           |                 |                 |                 | -0.147          | -0.039          | 0.107           | 0.011           | -0.033          | -0.044          | -0.018          | -0.027          | -0.009          | 0.9000 |
| 1.0000                    | -0.050          | -0.004          | 0.045           | -0.061          | -0.005          | 0.056           | -0.047          | -0.006          | 0.040           |                 |                 |                 | 0.016           | 0.002           | -0.015          | 0.039           | 0.008           | -0.032          | -0.021          | 0.025           | 0.046           | 1.0000 |
| M = 0.698      α = 03.91  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.319          | 0.263           | 0.582           | -0.459          | 0.262           | 0.720           | -0.879          | 0.284           | 1.163           |                 |                 |                 | -0.859          | 0.295           | 1.155           | -0.830          | 0.293           | 1.123           | -0.592          | 0.244           |                 | 0.0000 |
| 0.0125                    | -0.295          | 0.202           | 0.496           | -0.483          | 0.203           | 0.686           | -0.629          | 0.212           | 0.841           | -0.750          | 0.217           | 0.967           | -0.787          | 0.229           | 1.016           | -0.855          | 0.254           | 1.110           | -0.590          |                 |                 | 0.0125 |
| 0.0250                    | -0.272          | 0.154           | 0.426           | -0.457          | 0.158           | 0.615           | -0.450          | 0.158           | 0.608           | -0.526          | 0.159           | 0.685           | -0.683          | 0.178           | 0.861           | -0.862          | 0.220           | 1.081           | -0.589          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.207           |                 | 0.0420 |
| 0.0500                    | -0.229          | 0.103           | 0.332           | -0.260          | 0.103           | 0.363           | -0.304          | 0.106           | 0.410           |                 | 0.104           |                 | -0.380          | 0.120           | 0.500           | -0.818          | 0.162           | 0.980           | -0.587          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.182           |                 | 0.0640 |
| 0.0750                    | -0.186          | 0.078           | 0.264           | -0.236          | 0.078           | 0.314           | -0.276          | 0.076           | 0.352           | -0.322          | 0.069           | 0.391           | -0.343          | 0.092           | 0.435           | -0.726          | 0.125           | 0.850           | -0.588          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.159           |                 | 0.0810 |
| 0.1000                    | -0.190          | 0.059           | 0.249           | -0.222          | 0.058           | 0.280           | -0.262          | 0.060           | 0.322           | -0.304          | 0.055           | 0.359           | -0.320          | 0.070           | 0.390           | -0.575          | 0.101           | 0.675           | -0.588          | 0.144           | 0.732           | 0.1000 |
| 0.1500                    | -0.182          | 0.051           | 0.232           | -0.204          | 0.041           | 0.245           | -0.230          | 0.035           | 0.265           | -0.263          | 0.029           | 0.292           | -0.277          | 0.045           | 0.322           | -0.378          | 0.064           | 0.442           | -0.584          | 0.117           | 0.701           | 0.1500 |
| 0.2000                    | -0.171          | 0.038           | 0.209           | -0.190          | 0.030           | 0.220           | -0.207          | 0.044           | 0.251           | -0.241          |                 |                 | -0.250          | 0.028           | 0.278           | -0.278          | 0.047           | 0.325           | -0.579          | 0.091           | 0.670           | 0.2000 |
| 0.3000                    | -0.181          | 0.010           | 0.191           | -0.181          | 0.013           | 0.195           | -0.198          | 0.009           | 0.205           |                 |                 |                 | -0.221          | 0.014           | 0.235           | -0.209          | 0.020           | 0.229           | -0.567          | 0.057           | 0.624           | 0.3000 |
| 0.4000                    | -0.178          | -0.003          | 0.174           | -0.169          |                 | 0.168           | -0.179          | -0.006          | 0.173           |                 |                 |                 | -0.191          | 0.006           | 0.197           | -0.129          | 0.009           | 0.138           | -0.520          | 0.035           | 0.555           | 0.4000 |
| 0.5000                    | -0.158          | -0.011          | 0.147           | -0.157          | -0.014          | 0.143           | -0.158          | -0.014          | 0.144           |                 |                 |                 | -0.164          | -0.006          | 0.158           | -0.067          | 0.005           | 0.073           | -0.418          | 0.026           | 0.444           | 0.5000 |
| 0.6000                    | -0.138          | -0.016          | 0.122           | -0.139          | -0.021          | 0.117           | -0.149          | -0.018          | 0.131           |                 |                 |                 | -0.140          | -0.011          | 0.140           | -0.037          | 0.006           | 0.030           | -0.282          | 0.013           | 0.295           | 0.6000 |
| 0.7000                    | -0.137          | -0.009          | 0.128           | -0.153          | -0.023          | 0.130           | -0.168          | -0.020          | 0.148           |                 |                 |                 | -0.256          | -0.016          | 0.240           | -0.023          | -0.006          | 0.012           | -0.62           | 0.011           | 0.173           | 0.7000 |
| 0.8000                    | -0.181          | -0.025          | 0.157           | -0.186          | -0.022          | 0.164           | -0.211          | -0.021          | 0.190           |                 |                 |                 | -0.276          | -0.012          | 0.264           | -0.009          | -0.0            |                 |                 |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.700      α = 07.96 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.773          | 0.329           | 2.103           | -0.968          | 0.297           | 1.265           | -1.086          | 0.286           | 1.372           |                 |                 |                 | -0.948          | 0.262           | 1.210           | -0.850          | 0.191           | 1.040           | -0.587          | 0.233           |                 | 0.0000 |
| 0.0125                   | -1.037          | 0.315           | 1.352           | -1.124          | 0.293           | 1.417           | -1.047          | 0.290           | 1.337           | -1.010          | 0.259           | 1.269           | -0.956          | 0.282           | 1.238           | -0.845          | 0.252           | 1.097           | -0.581          |                 |                 | 0.0125 |
| 0.0250                   | -0.569          | 0.296           | 0.865           | -1.205          | 0.282           | 1.487           | -1.053          | 0.284           | 1.337           | -1.016          | 0.279           | 1.295           | -0.965          | 0.289           | 1.253           | -0.842          | 0.287           | 1.129           | -0.576          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.280           |                 | 0.0420 |
| 0.0500                   | -0.439          | 0.243           | 0.682           | -1.141          | 0.239           | 1.380           | -1.195          | 0.248           | 1.443           |                 | 0.243           |                 | -0.986          | 0.263           | 1.248           | -0.843          | 0.279           | 1.122           | -0.570          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.278           |                 | 0.0640 |
| 0.0750                   | -0.382          | 0.210           | 0.593           | -0.348          | 0.207           | 0.555           | -1.301          | 0.217           | 1.518           | -1.204          | 0.209           | 1.413           | -1.048          | 0.232           | 1.280           | -0.849          | 0.251           | 1.101           | -0.566          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.264           |                 | 0.0810 |
| 0.1000                   | -0.364          | 0.187           | 0.551           | -0.290          | 0.181           | 0.471           | -1.078          | 0.196           | 1.274           | -1.290          | 0.191           | 1.481           | -1.143          | 0.207           | 1.350           | -0.854          | 0.228           | 1.082           | -0.560          | 0.252           | 0.812           | 0.1000 |
| 0.1500                   | -0.341          | 0.164           | 0.505           | -0.331          | 0.155           | 0.486           | -0.212          | 0.161           | 1.373           | -1.069          | 0.159           | 1.228           | -1.225          | 0.173           | 1.398           | -0.877          | 0.194           | 1.072           | -0.549          | 0.227           | 0.776           | 0.1500 |
| 0.2000                   | -0.316          | 0.143           | 0.459           | -0.315          | 0.137           | 0.452           | -0.261          | 0.159           | 0.420           | -0.374          |                 |                 | -0.238          | 0.112           | 1.404           | -0.906          | 0.168           | 1.074           | -0.543          | 0.204           | 0.747           | 0.2000 |
| 0.3000                   | -0.310          | 0.105           | 0.415           | -0.302          | 0.104           | 0.405           | -0.288          | 0.103           | 0.391           |                 |                 |                 | -0.238          | 0.112           | 0.351           | -1.033          | 0.128           | 1.161           | -0.527          | 0.160           | 0.687           | 0.3000 |
| 0.4000                   | -0.292          | 0.082           | 0.375           | -0.275          | 0.080           | 0.355           | -0.261          | 0.081           | 0.342           |                 |                 |                 | -0.174          | 0.094           | 0.268           | -1.078          | 0.100           | 1.178           | -0.515          | 0.126           | 0.641           | 0.4000 |
| 0.5000                   | -0.256          | 0.063           | 0.319           | -0.244          | 0.058           | 0.302           | -0.231          | 0.064           | 0.295           |                 |                 |                 | -0.176          | 0.071           | 0.247           | -0.993          | 0.083           | 1.076           | -0.488          | 0.100           | 0.588           | 0.5000 |
| 0.6000                   | -0.218          | 0.046           | 0.264           | -0.209          | 0.041           | 0.250           | -0.200          | 0.049           | 0.249           |                 |                 |                 | -0.130          | 0.052           | 0.182           | -0.674          | 0.059           | 0.733           | -0.459          | 0.064           | 0.523           | 0.6000 |
| 0.7000                   | -0.188          | 0.041           | 0.229           | -0.192          | 0.024           | 0.216           | -0.186          | 0.034           | 0.220           |                 |                 |                 | -0.216          | 0.034           | 0.251           | -0.230          | 0.045           | 0.276           | -0.467          | 0.036           | 0.503           | 0.7000 |
| 0.8000                   | -0.213          | 0.012           | 0.225           | -0.214          | 0.012           | 0.226           | -0.227          | 0.018           | 0.246           |                 |                 |                 | -0.288          | 0.024           | 0.312           | 0.048           | 0.026           | -0.022          | -0.504          | -0.004          | 0.500           | 0.8000 |
| 0.9000                   | -0.178          | 0.004           | 0.182           | -0.181          | 0.010           | 0.191           | -0.189          | 0.014           | 0.203           |                 |                 |                 | -0.198          | 0.024           | 0.222           | 0.136           | 0.016           | -0.119          | -0.537          | -0.078          | 0.459           | 0.9000 |
| 1.0000                   | -0.082          | 0.017           | 0.100           | -0.092          | 0.020           | 0.112           | -0.070          | 0.021           | 0.091           |                 |                 |                 | 0.055           | 0.037           | -0.018          | 0.033           | 0.018           | -0.015          | -0.567          | -0.187          | 0.380           | 1.0000 |
| M = 0.697      α = 11.96 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.961          | 0.318           | 1.278           | -1.477          | 0.228           | 1.705           | -1.419          | 0.156           | 1.575           |                 |                 |                 | -1.234          | 0.102           | 1.336           | -0.860          | 0.060           | 0.920           | -0.469          | 0.166           |                 | 0.0000 |
| 0.0125                   | -1.670          | 0.381           | 2.052           | -1.467          | 0.312           | 1.779           | -1.425          | 0.271           | 1.697           | -1.345          | 0.192           | 1.537           | -1.243          | 0.238           | 1.481           | -0.841          | 0.202           | 1.043           | -0.484          |                 |                 | 0.0125 |
| 0.0250                   | -1.857          | 0.412           | 2.269           | -1.506          | 0.360           | 1.866           | -1.426          | 0.340           | 1.766           | -1.342          | 0.320           | 1.662           | -1.248          | 0.322           | 1.570           | -0.824          | 0.294           | 1.118           | -0.494          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.250           |                 | 0.0420 |
| 0.0500                   | -0.665          | 0.372           | 1.038           | -1.736          | 0.347           | 2.083           | -1.412          | 0.338           | 1.750           |                 | 0.329           |                 | -1.242          | 0.334           | 1.576           | -0.798          | 0.332           | 1.129           | -0.502          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.261           |                 | 0.0640 |
| 0.0750                   | -0.530          | 0.339           | 0.869           | -1.673          | 0.321           | 1.994           | -1.447          | 0.316           | 1.762           | -1.352          | 0.305           | 1.657           | -1.258          | 0.322           | 1.580           | -0.777          | 0.323           | 1.100           | -0.513          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.255           |                 | 0.0810 |
| 0.1000                   | -0.530          | 0.311           | 0.841           | -1.457          | 0.293           | 1.750           | -1.523          | 0.299           | 1.822           | -1.376          | 0.291           | 1.666           | -1.286          | 0.302           | 1.588           | -0.738          | 0.307           | 1.045           | -0.527          | 0.247           | 0.774           | 0.1000 |
| 0.1500                   | -0.508          | 0.277           | 0.785           | -0.661          | 0.264           | 0.925           | -1.667          | 0.259           | 1.926           | -1.674          | 0.257           | 1.931           | -1.362          | 0.271           | 1.633           | -0.683          | 0.277           | 0.961           | -0.544          | 0.230           | 0.774           | 0.1500 |
| 0.2000                   | -0.458          | 0.248           | 0.706           | -0.421          | 0.239           | 0.661           | -1.061          | 0.255           | 1.316           | -1.746          |                 |                 | -1.705          | 0.240           | 1.944           | -0.622          | 0.245           | 0.867           | -0.558          | 0.209           | 0.768           | 0.2000 |
| 0.3000                   | -0.415          | 0.202           | 0.616           | -0.357          | 0.197           | 0.554           | -0.319          | 0.195           | 0.514           |                 |                 |                 | -1.419          | 0.196           | 1.615           | -0.509          | 0.193           | 0.702           | -0.570          | 0.165           | 0.736           | 0.3000 |
| 0.4000                   | -0.351          | 0.169           | 0.520           | -0.294          | 0.163           | 0.457           | -0.232          | 0.157           | 0.389           |                 |                 |                 | -0.493          | 0.165           | 0.658           | -0.570          | 0.148           | 0.718           | -0.571          | 0.122           | 0.693           | 0.4000 |
| 0.5000                   | -0.256          | 0.137           | 0.393           | -0.214          | 0.131           | 0.345           | -0.159          | 0.127           | 0.286           |                 |                 |                 | -0.063          | 0.126           | 0.190           | -0.624          | 0.112           | 0.737           | -0.554          | 0.083           | 0.637           | 0.5000 |
| 0.6000                   | -0.182          | 0.108           | 0.290           | -0.157          | 0.098           | 0.255           | -0.136          | 0.096           | 0.232           |                 |                 |                 | -0.149          | 0.091           | 0.240           | -0.614          | 0.069           | 0.683           | -0.549          | 0.029           | 0.577           | 0.6000 |
| 0.7000                   | -0.205          | 0.084           | 0.289           | -0.225          | 0.063           | 0.288           | -0.242          | 0.063           | 0.305           |                 |                 |                 | -0.336          | 0.053           | 0.389           | -0.611          | 0.032           | 0.643           | -0.554          | -0.018          | 0.537           | 0.7000 |
| 0.8000                   | -0.292          | 0.031           | 0.323           | -0.304          | 0.025           | 0.329           | -0.341          | 0.021           | 0.362           |                 |                 |                 | -0.408          | 0.017           | 0.424           | -0.628          | -0.033          | 0.595           | -0.572          | -0.081          | 0.491           | 0.8000 |
| 0.9000                   | -0.270          | -0.007          | 0.263           | -0.283          | -0.008          | 0.275           | -0.301          | -0.016          | 0.285           |                 |                 |                 | -0.321          | -0.032          | 0.288           | -0.611          | -0.118          | 0.492           | -0.599          | -0.179          | 0.420           | 0.9000 |
| 1.0000                   | -0.138          | -0.030          | 0.108           | -0.161          | -0.035          | 0.126           | -0.122          | -0.047          | 0.075           |                 |                 |                 | -0.074          | -0.094          | -0.020          | -0.559          | -0.224          | 0.335           | -0.636          | -0.312          | 0.324           | 1.0000 |
| M = 0.699      α = 15.87 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -1.543          | 0.279           | 1.822           | -1.942          | 0.125           | 2.067           | -1.653          | -0.001          | 1.652           |                 |                 |                 | -1.415          | -0.065          | 1.350           | -0.799          | -0.072          | 0.727           | -0.506          | 0.069           |                 | 0.0000 |
| 0.0125                   | -2.041          | 0.417           | 2.459           | -1.797          | 0.297           | 2.094           | -1.658          | 0.225           | 1.883           | -1.560          | 0.130           | 1.690           | -1.427          | 0.169           | 1.596           | -0.783          | 0.134           | 0.916           | -0.514          |                 |                 | 0.0125 |
| 0.0250                   | -2.303          | 0.497           | 2.800           | -1.747          | 0.406           | 2.153           | -1.660          | 0.368           | 2.028           | -1.549          | 0.329           | 1.878           | -1.430          | 0.323           | 1.753           | -0.770          | 0.270           | 1.041           | -0.521          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.236           |                 | 0.0420 |
| 0.0500                   | -2.114          | 0.482           | 2.596           | -1.933          | 0.430           | 2.363           | -1.650          | 0.410           | 2.060           |                 | 0.385           |                 | -1.413          | 0.387           | 1.800           | -0.754          | 0.338           | 1.092           | -0.529          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.269           |                 | 0.0640 |
| 0.0750                   | -1.218          | 0.451           | 1.669           | -1.806          | 0.417           | 2.223           | -1.728          | 0.405           | 2.132           | -1.607          | 0.381           | 1.988           | -1.435          | 0.395           | 1.830           | -0.747          | 0.364           | 1.112           | -0.538          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.269           |                 | 0.0810 |
| 0.1000                   | -0.905          | 0.423           | 1.328           | -1.939          | 0.396           | 2.335           | -1.703          | 0.394           | 2.098           | -1.708          | 0.375           | 2.083           | -1.530          | 0.385           | 1.914           | -0.729          | 0.353           | 1.081           | -0.549          | 0.274           | 0.823           | 0.1000 |
| 0.1500                   | -0.759          | 0.384           | 1.143           | -1.617          | 0.366           | 1.983           | -1.919          | 0.358           | 2.277           | -1.611          | 0.342           | 1.953           | -1.508          | 0.359           | 1.866           | -0.719          | 0.332           | 1.051           | -0.563          | 0.262           | 0.826           | 0.1500 |
| 0.2000                   | -0.593          | 0.349           | 0.942           | -0.927          | 0.336           | 1.264           | -1.844          | 0.354           | 2.198           | -1.650          |                 |                 | -1.421          | 0.331           | 1.753           | -0.707          | 0.310           | 1.017           | -0.579          | 0.250           | 0.829           | 0.2000 |
| 0.3000                   | -0.505          | 0.295           | 0.800           | -0.496          | 0.290           | 0.787           | -0.812          | 0.288           | 1.100           |                 |                 |                 | -1.429          | 0.285           | 1.714           | -0.688          | 0.259           | 0.947           | -0.600          | 0.210           | 0.810           | 0.3000 |
| 0.4000                   | -0.383          | 0.255           | 0.638           | -0.342          | 0.250           | 0.592           | -0.377          | 0.243           | 0.620           |                 |                 |                 | -1.174          | 0.248           | 1.422           | -0.587          | 0.212           | 0.799           | -0.621          | 0.162           | 0.783           | 0.4000 |
| 0.5000                   | -0.260          | 0.214           | 0.474           | -0.220          | 0.206           | 0.425           | -0.209          | 0.203           | 0.412           |                 |                 |                 | -0.756          | 0.202           | 0.958           | -0.627          | 0.173           | 0.800           | -0.627          | 0.120           | 0.747           | 0.5000 |
| 0.6000                   | -0.259          | 0.175           | 0.434           | -0.296          | 0.163           | 0.458           | -0.380          | 0.157           | 0.537           |                 |                 |                 | -0.638          | 0.158           | 0.795           | -0.629          | 0.120           | 0.749           | -0.636          | 0.065           | 0.701           | 0.6000 |
| 0.7000                   | -0.309          | 0.143           | 0.392           | -0.343          | 0.115           | 0.453           | -0.363          | 0.115           | 0.478           |                 |                 |                 | -0.402          | 0.105           | 0.507           | -0.639          | 0.070           | 0.709           | -0.646          | 0.011           | 0.656           | 0.7000 |
| 0.8000                   | -0.324          | 0.068           | 0.392           | -0.334          | 0.061           | 0.395           | -0.360          | 0.057           | 0.417           |                 |                 |                 | -0.351          | 0.052           | 0.403           | -0.657          | -0.0.           |                 |                 |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

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| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.302      α = -03.90 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.305           | -0.163          | -0.469          | 0.289           | -0.244          | -0.533          | 0.305           | -0.316          | -0.621          |                 |                 |                 | 0.339           | -0.371          | -0.711          | 0.339           | -0.508          | -0.847          | 0.371           | -0.681          |                 | 0.0000 |
| 0.0125                    | 0.250           | -0.121          | -0.371          | 0.245           | -0.214          | -0.459          | 0.234           | -0.288          | -0.522          | 0.226           | -0.352          | -0.578          | 0.252           | -0.357          | -0.608          | 0.271           | -0.467          | -0.738          | 0.290           | -0.537          |                 | 0.0125 |
| 0.0250                    | 0.206           | -0.094          | -0.300          | 0.203           | -0.191          | -0.394          | 0.183           | -0.268          | -0.451          | 0.179           | -0.323          | -0.502          | 0.189           | -0.343          | -0.532          | 0.219           | -0.442          | -0.661          | 0.232           | -0.532          |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.153           | -0.080          | -0.234          | 0.124           | -0.166          | -0.290          | 0.140           | -0.250          | -0.390          |                 | -0.315          |                 | 0.137           | -0.322          | -0.459          | 0.164           | -0.441          | -0.605          | 0.185           | -0.532          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.132           | -0.089          | -0.221          | 0.116           | -0.127          | -0.243          | 0.105           | -0.148          | -0.253          | 0.098           | -0.213          | -0.311          | 0.106           | -0.293          | -0.399          | 0.126           | -0.451          | -0.577          | 0.157           | -0.515          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.090           | -0.082          | -0.172          | 0.103           | -0.121          | -0.224          | 0.098           | -0.141          | -0.239          | 0.074           | -0.140          | -0.214          | 0.096           | -0.152          | -0.248          | 0.101           | -0.447          | -0.549          | 0.139           | -0.533          | -0.672          | 0.1000 |
| 0.1500                    | 0.077           | -0.087          | -0.164          | 0.075           | -0.095          | -0.170          | 0.063           | -0.122          | -0.184          | 0.067           | -0.139          | -0.206          | 0.070           | -0.150          | -0.220          | 0.088           | -0.371          | -0.458          | 0.113           | -0.537          | -0.650          | 0.1500 |
| 0.2000                    | 0.056           | -0.077          | -0.133          | 0.068           | -0.085          | -0.153          | 0.058           | -0.066          | -0.124          | 0.055           |                 |                 | 0.057           | -0.143          | -0.200          | 0.069           | -0.242          | -0.311          | 0.099           | -0.537          | -0.636          | 0.2000 |
| 0.3000                    | 0.037           | -0.079          | -0.115          | 0.056           | -0.084          | -0.140          | 0.048           | -0.106          | -0.154          |                 |                 |                 | 0.071           | -0.136          | -0.207          | 0.063           | -0.192          | -0.255          | 0.087           | -0.495          | -0.583          | 0.3000 |
| 0.4000                    | 0.038           | -0.090          | -0.128          | 0.047           | -0.093          | -0.140          | 0.045           | -0.114          | -0.159          |                 |                 |                 | 0.054           | -0.124          | -0.178          | 0.049           | -0.188          | -0.238          | 0.083           | -0.382          | -0.465          | 0.4000 |
| 0.5000                    | 0.045           | -0.099          | -0.144          | 0.058           | -0.106          | -0.164          | 0.052           | -0.114          | -0.166          |                 |                 |                 | 0.040           | -0.140          | -0.180          | 0.095           | -0.186          | -0.281          | 0.095           | -0.276          | -0.371          | 0.5000 |
| 0.6000                    | 0.048           | -0.106          | -0.154          | 0.037           | -0.116          | -0.153          | 0.030           | -0.125          | -0.154          |                 |                 |                 | 0.034           | -0.134          | -0.168          | 0.126           | -0.173          | -0.299          | 0.091           | -0.243          | -0.334          | 0.6000 |
| 0.7000                    | 0.019           | -0.112          | -0.131          | 0.011           | -0.125          | -0.136          | 0.015           | -0.129          | -0.145          |                 |                 |                 | 0.051           | -0.142          | -0.193          | 0.099           | -0.176          | -0.275          | 0.081           | -0.224          | -0.305          | 0.7000 |
| 0.8000                    | -0.001          | -0.143          | -0.142          | 0.030           | -0.134          | -0.163          | 0.022           | -0.132          | -0.154          |                 |                 |                 | -0.024          | -0.140          | -0.116          | 0.074           | -0.170          | -0.244          | 0.076           | -0.202          | -0.278          | 0.8000 |
| 0.9000                    | -0.011          | -0.131          | -0.120          | -0.015          | -0.133          | -0.117          | -0.035          | -0.140          | -0.105          |                 |                 |                 | -0.081          | -0.138          | -0.056          | 0.068           | -0.165          | -0.233          | 0.067           | -0.192          | -0.259          | 0.9000 |
| 1.0000                    | -0.010          | -0.076          | -0.066          | -0.123          | -0.122          | 0.001           | -0.155          | -0.154          | 0.001           |                 |                 |                 | -0.120          | -0.135          | -0.015          | 0.080           | -0.161          | -0.242          | 0.054           | -0.193          | -0.247          | 1.0000 |
| M = 1.304      α = -00.05 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.109           | 0.105           | -0.004          | 0.081           | 0.086           | 0.006           | 0.082           | 0.056           | -0.026          |                 |                 |                 | 0.086           | 0.036           | -0.050          | 0.047           | 0.036           | -0.011          | -0.001          | -0.097          |                 | 0.0000 |
| 0.0125                    | 0.091           | 0.074           | -0.016          | 0.053           | 0.052           | -0.001          | 0.029           | 0.027           | -0.002          | 0.029           | 0.019           | -0.009          | 0.029           | 0.008           | -0.021          | 0.007           | -0.005          | -0.012          | -0.008          | -0.028          |                 | 0.0125 |
| 0.0250                    | 0.070           | 0.053           | -0.018          | 0.031           | 0.026           | -0.006          | -0.004          | 0.004           | 0.008           | 0.003           | -0.009          | -0.012          | -0.008          | -0.014          | -0.006          | -0.022          | -0.036          | -0.014          | -0.052          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.024           | 0.036           | 0.011           | 0.008           | -0.001          | -0.008          | -0.011          | -0.021          | -0.010          |                 | -0.038          |                 | -0.023          | -0.036          | -0.013          | -0.049          | -0.069          | -0.019          | -0.086          | -0.100          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.034           | 0.015           | -0.020          | -0.012          | -0.011          | 0.001           | -0.011          | -0.030          | -0.019          | -0.040          | -0.047          | -0.007          | -0.040          | -0.036          | 0.003           | -0.069          | -0.080          | -0.011          | -0.096          | -0.100          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.013          | 0.011           | 0.024           | -0.008          | -0.024          | -0.016          | -0.031          | -0.032          | -0.001          | -0.046          | -0.041          | 0.004           | -0.053          | -0.038          | 0.015           | -0.073          | -0.082          | -0.009          | -0.100          | -0.097          | 0.004           | 0.1000 |
| 0.1500                    | -0.007          | -0.016          | -0.009          | -0.018          | -0.023          | -0.006          | -0.038          | -0.035          | 0.003           | -0.053          | -0.038          | 0.015           | -0.048          | -0.048          | -0.004          | -0.079          | -0.076          | 0.003           | -0.095          | -0.094          | 0.004           | 0.1500 |
| 0.2000                    | -0.021          | -0.012          | 0.009           | -0.024          | -0.019          | 0.006           | -0.031          | 0.005           | 0.036           | -0.047          |                 |                 | -0.048          | -0.052          | -0.004          | -0.079          | -0.076          | 0.003           | -0.095          | -0.102          | -0.007          | 0.2000 |
| 0.3000                    | -0.030          | -0.024          | 0.005           | -0.037          | -0.025          | 0.012           | -0.041          | -0.040          | 0.001           |                 |                 |                 | -0.048          | -0.050          | -0.003          | -0.079          | -0.078          | 0.001           | -0.086          | -0.111          | -0.025          | 0.3000 |
| 0.4000                    | -0.042          | -0.029          | 0.013           | -0.036          | -0.032          | 0.004           | -0.041          | -0.045          | -0.004          |                 |                 |                 | -0.050          | -0.050          |                 | -0.056          | -0.088          | -0.032          | -0.087          | -0.117          | -0.030          | 0.4000 |
| 0.5000                    | -0.035          | -0.037          | 0.002           | -0.034          | -0.045          | -0.011          | -0.041          | -0.051          | -0.010          |                 |                 |                 | -0.056          | -0.066          | -0.010          | -0.032          | -0.089          | -0.037          | -0.077          | -0.119          | -0.042          | 0.5000 |
| 0.6000                    | -0.022          | -0.045          | -0.022          | -0.032          | -0.055          | -0.023          | -0.045          | -0.064          | -0.019          |                 |                 |                 | -0.046          | -0.067          | -0.021          | 0.042           | -0.091          | -0.133          | -0.062          | -0.118          | -0.056          | 0.6000 |
| 0.7000                    | -0.045          | -0.051          | -0.006          | -0.056          | -0.066          | -0.009          | -0.051          | -0.068          | -0.017          |                 |                 |                 | -0.055          | -0.077          | -0.022          | 0.056           | -0.096          | -0.152          | -0.053          | -0.111          | -0.058          | 0.7000 |
| 0.8000                    | -0.079          | -0.086          | -0.008          | -0.050          | -0.079          | -0.029          | -0.059          | -0.072          | -0.012          |                 |                 |                 | -0.129          | -0.079          | 0.049           | 0.016           | -0.085          | -0.101          | -0.036          | -0.112          | -0.075          | 0.8000 |
| 0.9000                    | -0.087          | -0.078          | 0.008           | -0.101          | -0.079          | 0.022           | -0.132          | -0.086          | 0.046           |                 |                 |                 | -0.172          | -0.084          | 0.088           | 0.022           | -0.090          | -0.112          | -0.006          | -0.106          | -0.100          | 0.9000 |
| 1.0000                    | -0.070          | -0.027          | 0.042           | -0.208          | -0.063          | 0.146           | -0.269          | -0.113          | 0.156           |                 |                 |                 | -0.184          | -0.091          | 0.093           | 0.073           | -0.111          | -0.184          | 0.037           | -0.094          | -0.131          | 1.0000 |
| M = 1.303      α = 04.11  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.128          | 0.307           | 0.435           | -0.260          | 0.302           | 0.561           | -0.312          | 0.312           | 0.624           |                 |                 |                 | -0.438          | 0.302           | 0.740           | -0.588          | 0.320           | 0.909           | -0.627          | 0.231           |                 | 0.0000 |
| 0.0125                    | -0.126          | 0.239           | 0.365           | -0.224          | 0.230           | 0.454           | -0.297          | 0.231           | 0.529           |                 | -0.357          | 0.240           | -0.400          | 0.235           | 0.635           | -0.519          | 0.257           | 0.775           | -0.578          |                 |                 | 0.0125 |
| 0.0250                    | -0.121          | 0.189           | 0.310           | -0.196          | 0.178           | 0.374           | -0.278          | 0.173           | 0.451           | -0.348          | 0.179           | 0.527           | -0.375          | 0.185           | 0.560           | -0.474          | 0.208           | 0.682           | -0.546          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.102          | 0.148           | 0.250           | -0.166          | 0.131           | 0.297           | -0.227          | 0.125           | 0.353           |                 | 0.129           |                 | -0.362          | 0.135           | 0.497           | -0.462          | 0.154           | 0.616           | -0.537          | 0.191           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.097          | 0.114           | 0.212           | -0.153          | 0.100           | 0.253           | -0.185          | 0.101           | 0.286           | -0.247          | 0.097           | 0.343           | -0.290          | 0.114           | 0.404           | -0.464          | 0.118           | 0.582           | -0.540          | 0.167           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.109          | 0.102           | 0.211           | -0.134          | 0.081           | 0.215           | -0.151          | 0.090           | 0.240           |                 | -0.169          | 0.090           | -0.168          | 0.093           | 0.261           | -0.461          | 0.103           | 0.565           | -0.540          | 0.132           | 0.672           | 0.1000 |
| 0.1500                    | -0.086          | 0.071           | 0.157           | -0.125          | 0.072           | 0.197           | -0.135          | 0.065           | 0.200           | -0.163          | 0.070           | 0.233           | -0.183          | 0.062           | 0.244           | -0.423          | 0.085           | 0.508           | -0.549          | 0.108           | 0.657           | 0.1500 |
| 0.2000                    | -0.097          | 0.067           | 0.163           | -0.116          | 0.066           | 0.181           | -0.129          | 0.089           | 0.218           | -0.146          |                 |                 | -0.154          | 0.058           | 0.212           | -0.310          | 0.078           | 0.388           | -0.559          | 0.085           | 0.644           | 0.2000 |
| 0.3000                    | -0.097          | 0.048           | 0.145           | -0.119          | 0.052           | 0.171           | -0.133          | 0.050           | 0.183           |                 |                 |                 | -0.148          | 0.042           | 0.190           | -0.198          | 0.042           | 0.239           | -0.511          | 0.056           | 0.568           | 0.3000 |
| 0.4000                    | -0.110          | 0.040           | 0.149           | -0.106          | 0.041           | 0.148           | -0.118          | 0.035           | 0.153           |                 |                 |                 | -0.137          | 0.050           | 0.187           | -0.190          | 0.027           | 0.218           | -0.457          | 0.046           | 0.503           | 0.4000 |
| 0.5000                    | -0.109          | 0.028           | 0.137           | -0.111          | 0.022           | 0.133           | -0.118          | 0.026           | 0.144           |                 |                 |                 | -0.137          | 0.013           | 0.152           | -0.122          | 0.021           | 0.143           | -0.345          | 0.035           | 0.380           | 0.5000 |
| 0.6000                    | -0.095          | 0.021           | 0.116           | -0.113          | 0.013           | 0.126           | -0.126          | 0.012           | 0.138           |                 |                 |                 | -0.137          | 0.010           | 0.150           | -0.040          | 0.002           | 0.042           | -0.237          | 0.022           | 0.259           | 0.6000 |
| 0.7000                    | -0.112          | 0.018           | 0.130           | -0.127          | 0.001           | 0.129           | -0.130          | 0.004           | 0.134           |                 |                 |                 | -0.135          | 0.002           | 0.137           | -0.025          | 0.017           | 0.042           | -0.182          | -0.016          | -0.198          | 0.7000 |
| 0.8000                    | -0.150          | -0.009          | 0.141           | -0.123          | -0.007          | 0.116           | -0.137          | -0.005          | 0.132           |                 |                 |                 | -0.222          | -0.007          | 0.215           | -0.052          | 0.003           | 0.055           | -0.146          |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |     |
| M = 1.302      α = 08.11 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.397          | 0.416           | 0.813           | -0.486          | 0.393           | 0.879           | -0.503          | 0.394           | 0.897           | -0.518          | 0.349           | 0.867           | -0.546          | 0.395           | 0.941           | -0.520          | 0.373           | 0.893           | -0.525          | 0.335           | 0.0000          |     |
| 0.0125                   | -0.378          | 0.369           | 0.747           | -0.488          | 0.348           | 0.835           | -0.498          | 0.342           | 0.840           | -0.518          | 0.307           | 0.867           | -0.538          | 0.353           | 0.890           | -0.510          | 0.354           | 0.864           | -0.529          |                 | 0.0125          |     |
| 0.0250                   | -0.341          | 0.329           | 0.670           | -0.491          | 0.309           | 0.800           | -0.496          | 0.302           | 0.798           | -0.521          |                 | 0.828           | -0.532          | 0.318           | 0.849           | -0.505          | 0.335           | 0.840           | -0.532          | 0.318           | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.210          | 0.276           | 0.485           | -0.498          | 0.255           | 0.753           | -0.499          | 0.260           | 0.759           |                 | 0.254           |                 | -0.527          | 0.270           | 0.797           | -0.507          | 0.296           | 0.803           | -0.532          | 0.303           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.191          | 0.234           | 0.426           | -0.405          | 0.219           | 0.624           | -0.508          | 0.233           | 0.741           | -0.528          | 0.220           | 0.747           | -0.534          | 0.241           | 0.774           | -0.510          | 0.267           | 0.778           | -0.534          | 0.289           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.168          | 0.215           | 0.384           | -0.321          | 0.197           | 0.519           | -0.466          | 0.209           | 0.676           | -0.473          | 0.204           | 0.677           | -0.531          | 0.215           | 0.745           | -0.512          | 0.248           | 0.760           | -0.538          | 0.277           | 0.1000          |     |
| 0.1500                   | -0.179          | 0.178           | 0.357           | -0.201          | 0.177           | 0.378           | -0.398          | 0.177           | 0.575           | -0.407          | 0.173           | 0.579           | -0.482          | 0.188           | 0.670           | -0.525          | 0.212           | 0.737           | -0.542          | 0.256           | 0.1500          |     |
| 0.2000                   | -0.174          | 0.163           | 0.336           | -0.173          | 0.166           | 0.339           | -0.324          | 0.187           | 0.511           | -0.374          |                 |                 | -0.458          | 0.180           | 0.638           | -0.519          | 0.193           | 0.711           | -0.546          | 0.234           | 0.2000          |     |
| 0.3000                   | -0.157          | 0.139           | 0.296           | -0.171          | 0.144           | 0.315           | -0.175          | 0.149           | 0.324           |                 |                 |                 | -0.391          | 0.165           | 0.556           | -0.511          | 0.160           | 0.671           | -0.532          | 0.201           | 0.3000          |     |
| 0.4000                   | -0.167          | 0.140           | 0.307           | -0.157          | 0.136           | 0.294           | -0.144          | 0.136           | 0.280           |                 |                 |                 | -0.271          | 0.138           | 0.409           | -0.485          | 0.143           | 0.628           | -0.530          | 0.177           | 0.4000          |     |
| 0.5000                   | -0.162          | 0.121           | 0.284           | -0.165          | 0.116           | 0.281           | -0.157          | 0.116           | 0.273           |                 |                 |                 | -0.160          | 0.120           | 0.280           | -0.527          | 0.133           | 0.660           | -0.524          | 0.177           | 0.5000          |     |
| 0.6000                   | -0.151          | 0.104           | 0.255           | -0.167          | 0.100           | 0.267           | -0.174          | 0.106           | 0.280           |                 |                 |                 | -0.156          | 0.109           | 0.265           | -0.482          | 0.126           | 0.609           | -0.521          | 0.165           | 0.6000          |     |
| 0.7000                   | -0.170          | 0.102           | 0.273           | -0.184          | 0.094           | 0.278           | -0.179          | 0.105           | 0.284           |                 |                 |                 | -0.063          | 0.103           | 0.167           | -0.472          | 0.117           | 0.589           | -0.518          | 0.152           | 0.7000          |     |
| 0.8000                   | -0.202          | 0.077           | 0.279           | -0.175          | 0.078           | 0.253           | -0.123          | 0.085           | 0.209           |                 |                 |                 | -0.237          | 0.107           | 0.344           | -0.427          | 0.124           | 0.551           | -0.509          | 0.134           | 0.8000          |     |
| 0.9000                   | -0.161          | 0.092           | 0.254           | -0.197          | 0.100           | 0.297           | -0.242          | 0.100           | 0.341           |                 |                 |                 | -0.299          | 0.102           | 0.401           | -0.224          | 0.091           | 0.315           | -0.424          | 0.138           | 0.9000          |     |
| 1.0000                   | -0.048          | 0.149           | 0.197           | -0.251          | 0.160           | 0.410           | -0.534          | 0.148           | 0.682           |                 |                 |                 | -0.249          | 0.088           | 0.338           | -0.138          | 0.018           | -0.120          | -0.264          | 0.163           | 1.0000          |     |
| M = 1.302      α = 12.21 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.527          | 0.489           | 1.016           | -0.586          | 0.439           | 1.025           | -0.577          | 0.441           | 1.018           |                 |                 |                 | -0.563          | 0.416           | 0.979           | -0.544          | 0.378           | 0.921           | -0.537          | 0.361           | 0.0000          |     |
| 0.0125                   | -0.557          | 0.469           | 1.026           | -0.587          | 0.429           | 1.016           | -0.575          | 0.424           | 1.000           | -0.587          | 0.412           | 0.999           | -0.565          | 0.419           | 0.983           | -0.539          | 0.401           | 0.940           | -0.546          |                 | 0.0125          |     |
| 0.0250                   | -0.574          | 0.446           | 1.021           | -0.589          | 0.414           | 1.003           | -0.575          | 0.407           | 0.983           | -0.591          | 0.402           | 0.993           | -0.566          | 0.413           | 0.979           | -0.536          | 0.413           | 0.949           | -0.551          | 0.407           | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.569          | 0.391           | 0.960           | -0.593          | 0.367           | 0.960           | -0.578          | 0.373           | 0.951           |                 | 0.367           |                 | -0.566          | 0.380           | 0.946           | -0.537          | 0.404           | 0.942           | -0.551          | 0.407           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.532          | 0.351           | 0.882           | -0.614          | 0.347           | 0.961           | -0.584          | 0.341           | 0.924           | -0.591          | 0.334           | 0.925           | -0.568          | 0.355           | 0.923           | -0.540          | 0.381           | 0.921           | -0.553          | 0.395           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.269          | 0.325           | 0.594           | -0.605          | 0.314           | 0.919           | -0.594          | 0.319           | 0.913           | -0.587          | 0.325           | 0.912           | -0.572          | 0.334           | 0.906           | -0.540          | 0.362           | 0.903           | -0.558          | 0.388           | 0.1000          |     |
| 0.1500                   | -0.251          | 0.300           | 0.551           | -0.592          | 0.273           | 0.865           | -0.594          | 0.295           | 0.889           | -0.594          | 0.286           | 0.880           | -0.576          | 0.312           | 0.888           | -0.548          | 0.333           | 0.880           | -0.566          | 0.371           | 0.1500          |     |
| 0.2000                   | -0.232          | 0.255           | 0.487           | -0.478          | 0.278           | 0.756           | -0.591          | 0.292           | 0.883           | -0.598          |                 |                 | -0.588          | 0.300           | 0.888           | -0.548          | 0.313           | 0.860           | -0.579          | 0.349           | 0.2000          |     |
| 0.3000                   | -0.194          | 0.236           | 0.431           | -0.195          | 0.256           | 0.451           | -0.547          | 0.260           | 0.807           |                 |                 |                 | -0.598          | 0.263           | 0.861           | -0.571          | 0.281           | 0.852           | -0.586          | 0.313           | 0.3000          |     |
| 0.4000                   | -0.212          | 0.237           | 0.449           | -0.188          | 0.235           | 0.422           | -0.206          | 0.239           | 0.444           |                 |                 |                 | -0.608          | 0.248           | 0.856           | -0.581          | 0.277           | 0.858           | -0.615          | 0.285           | 0.4000          |     |
| 0.5000                   | -0.208          | 0.214           | 0.422           | -0.204          | 0.209           | 0.413           | -0.186          | 0.219           | 0.405           |                 |                 |                 | -0.616          | 0.231           | 0.847           | -0.627          | 0.273           | 0.900           | -0.632          | 0.265           | 0.5000          |     |
| 0.6000                   | -0.199          | 0.209           | 0.408           | -0.215          | 0.206           | 0.421           | -0.208          | 0.216           | 0.424           |                 |                 |                 | -0.492          | 0.234           | 0.726           | -0.655          | 0.238           | 0.892           | -0.638          | 0.254           | 0.6000          |     |
| 0.7000                   | -0.218          | 0.226           | 0.444           | -0.226          | 0.222           | 0.448           | -0.213          | 0.233           | 0.447           |                 |                 |                 | -0.272          | 0.222           | 0.494           | -0.638          | 0.205           | 0.842           | -0.627          | 0.249           | 0.7000          |     |
| 0.8000                   | -0.241          | 0.174           | 0.415           | -0.227          | 0.174           | 0.401           | -0.136          | 0.178           | 0.313           |                 |                 |                 | -0.256          | 0.177           | 0.434           | -0.640          | 0.189           | 0.829           | -0.524          | 0.231           | 0.8000          |     |
| 0.9000                   | -0.161          | 0.154           | 0.316           | -0.191          | 0.159           | 0.350           | -0.240          | 0.159           | 0.398           |                 |                 |                 | -0.352          | 0.166           | 0.518           | -0.617          | 0.175           | 0.792           | -0.488          | 0.221           | 0.9000          |     |
| 1.0000                   | -0.021          | 0.166           | 0.146           | -0.119          | 0.176           | 0.295           | -0.524          | 0.176           | 0.701           |                 |                 |                 | -0.558          | 0.190           | 0.748           | -0.568          | 0.162           | 0.729           | -0.518          | 0.221           | 1.0000          |     |
| M = 1.300      α = 16.07 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.654          | 0.537           | 1.192           | -0.653          | 0.465           | 1.118           | -0.642          | 0.428           | 1.070           |                 |                 |                 | -0.627          | 0.391           | 1.018           | -0.594          | 0.346           | 0.940           | -0.461          | 0.373           | 0.0000          |     |
| 0.0125                   | -0.658          | 0.551           | 1.209           | -0.657          | 0.491           | 1.149           | -0.642          | 0.466           | 1.109           | -0.639          | 0.437           | 1.076           | -0.617          | 0.444           | 1.062           | -0.585          | 0.424           | 1.009           | -0.464          |                 | 0.0125          |     |
| 0.0250                   | -0.662          | 0.552           | 1.213           | -0.660          | 0.502           | 1.162           | -0.642          | 0.486           | 1.128           | -0.638          | 0.476           | 1.114           | -0.611          | 0.476           | 1.087           | -0.581          | 0.474           | 1.055           | -0.465          | 0.442           | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.672          | 0.511           | 1.183           | -0.662          | 0.476           | 1.137           | -0.642          | 0.468           | 1.110           |                 | 0.466           |                 | -0.606          | 0.472           | 1.078           | -0.585          | 0.489           | 1.073           | -0.464          | 0.455           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.677          | 0.470           | 1.147           | -0.675          | 0.450           | 1.125           | -0.648          | 0.443           | 1.091           | -0.629          | 0.435           | 1.066           | -0.606          | 0.461           | 1.067           | -0.589          | 0.480           | 1.069           | -0.463          | 0.454           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.628          | 0.432           | 1.061           | -0.677          | 0.424           | 1.101           | -0.657          | 0.426           | 1.084           | -0.635          | 0.427           | 1.062           | -0.608          | 0.446           | 1.054           | -0.589          | 0.466           | 1.055           | -0.464          | 0.456           | 0.1000          |     |
| 0.1500                   | -0.494          | 0.407           | 0.901           | -0.684          | 0.388           | 1.072           | -0.656          | 0.386           | 1.042           | -0.648          | 0.404           | 1.052           | -0.620          | 0.420           | 1.040           | -0.599          | 0.440           | 1.039           | -0.468          | 0.448           | 0.1500          |     |
| 0.2000                   | -0.360          | 0.369           | 0.728           | -0.661          | 0.370           | 1.031           | -0.687          | 0.405           | 1.092           | -0.653          |                 |                 | -0.642          | 0.399           | 1.041           | -0.596          | 0.416           | 1.013           | -0.477          | 0.439           | 0.2000          |     |
| 0.3000                   | -0.267          | 0.355           | 0.622           | -0.482          | 0.353           | 0.835           | -0.687          | 0.356           | 1.043           |                 |                 |                 | -0.660          | 0.392           | 1.052           | -0.599          | 0.383           | 0.982           | -0.497          | 0.416           | 0.3000          |     |
| 0.4000                   | -0.269          | 0.342           | 0.611           | -0.331          | 0.347           | 0.678           | -0.576          | 0.361           | 0.937           |                 |                 |                 | -0.701          | 0.357           | 1.058           | -0.556          | 0.353           | 0.909           | -0.526          | 0.393           | 0.4000          |     |
| 0.5000                   | -0.265          | 0.343           | 0.608           | -0.284          | 0.329           | 0.614           | -0.435          | 0.323           | 0.758           |                 |                 |                 | -0.705          | 0.323           | 1.028           | -0.571          | 0.344           | 0.915           | -0.538          | 0.376           | 0.5000          |     |
| 0.6000                   | -0.253          | 0.301           | 0.554           | -0.269          | 0.292           | 0.561           | -0.344          | 0.298           | 0.642           |                 |                 |                 | -0.669          | 0.306           | 0.975           | -0.572          | 0.332           | 0.904           | -0.549          | 0.355           | 0.6000          |     |
| 0.7000                   | -0.265          | 0.294           | 0.558           | -0.284          | 0.277           | 0.561           | -0.312          | 0.287           | 0.600           |                 |                 |                 | -0.571          | 0.295           | 0.866           | -0.574          | 0.319           | 0.893           | -0.559          | 0.345           | 0.7000          |     |
| 0.8000                   | -0.296          | 0.269           | 0.565           | -0.288          | 0.272           | 0.560           | -0.295          | 0.278           | 0.573           |                 |                 |                 | -0.346          | 0.287           | 0.633           | -0.576          | 0.299           | 0.875           | -0.559          | 0.330           | 0.8000          |     |
| 0.9000                   | -0.217          | 0.260           | 0.477           | -0.170          | 0.264           | 0.434           | -0.222          | 0.264           | 0.486           |                 |                 |                 | -0.483          | 0.275           | 0.757           | -0.576          | 0.287           | 0.863           | -0.555          | 0.336           | 0.9000          |     |
| 1.0000                   | -0.028          | 0.266           | 0.294           | 0.072           | 0.253           | 0.181           | -0.093          | 0.245           | 0.338           |                 |                 |                 | -0.980          |                 |                 |                 |                 |                 |                 |                 |                 |     |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 2.228      α = -0.375 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.315           | -0.030          | -0.345          | 0.261           | -0.014          | -0.275          | 0.272           | -0.003          | -0.276          |                 |                 |                 | 0.291           | 0.015           | -0.276          | 0.300           | 0.010           | -0.290          | 0.321           | -0.108          |                 | 0.0000 |
| 0.0125                    | 0.222           | -0.023          | -0.245          | 0.208           | -0.025          | -0.233          | 0.221           | -0.023          | -0.243          | 0.220           | -0.020          | -0.240          | 0.234           | -0.009          | -0.243          | 0.251           | -0.001          | -0.252          | 0.257           |                 |                 | 0.0125 |
| 0.0250                    | 0.159           | -0.019          | -0.178          | 0.168           | -0.033          | -0.201          | 0.180           | -0.037          | -0.217          | 0.182           | -0.036          | -0.218          | 0.191           | -0.021          | -0.211          | 0.212           | -0.012          | -0.224          | 0.210           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.123           | -0.021          | -0.144          | 0.130           | -0.040          | -0.170          | 0.134           | -0.049          | -0.183          |                 | -0.052          |                 | 0.148           | -0.002          | -0.150          | 0.163           | -0.034          | -0.197          | 0.168           | -0.036          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.110           | -0.026          | -0.136          | 0.108           | -0.039          | -0.147          | 0.113           | -0.056          | -0.168          | 0.117           | -0.061          | -0.178          | 0.122           | -0.039          | -0.160          | 0.138           | -0.042          | -0.180          | 0.147           | -0.033          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.100           | -0.026          | -0.126          | 0.099           | -0.041          | -0.140          | 0.095           | -0.052          | -0.147          | 0.092           | -0.061          | -0.153          | 0.094           | -0.052          | -0.146          | 0.116           | -0.051          | -0.166          | 0.133           | -0.047          | -0.180          | 0.1000 |
| 0.1500                    | 0.078           | -0.026          | -0.104          | 0.070           | -0.045          | -0.115          | 0.070           | -0.048          | -0.118          | 0.069           | -0.063          | -0.133          | 0.071           | -0.057          | -0.128          | 0.091           | -0.064          | -0.154          | 0.115           | -0.048          | -0.163          | 0.1500 |
| 0.2000                    | 0.067           | -0.026          | -0.092          | 0.060           | -0.044          | -0.104          | 0.067           | -0.079          | -0.102          | 0.063           |                 |                 | 0.065           | -0.059          | -0.124          | 0.082           | -0.061          | -0.143          | 0.100           | -0.054          | -0.153          | 0.2000 |
| 0.3000                    | 0.057           | -0.035          | -0.092          | 0.048           | -0.018          | -0.066          | 0.046           | -0.053          | -0.099          |                 |                 |                 | 0.054           | -0.061          | -0.115          | 0.060           | -0.076          | -0.136          | 0.092           | -0.061          | -0.154          | 0.3000 |
| 0.4000                    | 0.028           | -0.032          | -0.059          | 0.032           | -0.039          | -0.071          | 0.031           | -0.047          | -0.078          |                 |                 |                 | 0.044           | -0.055          | -0.099          | 0.059           | -0.083          | -0.142          | 0.065           | -0.069          | -0.134          | 0.4000 |
| 0.5000                    | 0.025           | -0.041          | -0.066          | 0.023           | -0.042          | -0.065          | 0.028           | -0.049          | -0.077          |                 |                 |                 | 0.031           | -0.053          | -0.084          | 0.047           | -0.088          | -0.134          | 0.056           | -0.074          | -0.130          | 0.5000 |
| 0.6000                    | 0.053           | -0.046          | -0.099          | 0.018           | -0.053          | -0.071          | 0.018           | -0.057          | -0.076          |                 |                 |                 | 0.024           | -0.058          | -0.082          | 0.068           | -0.092          | -0.160          | 0.046           | -0.085          | -0.131          | 0.6000 |
| 0.7000                    | 0.041           | -0.046          | -0.087          | 0.012           | -0.052          | -0.064          | 0.015           | -0.055          | -0.069          |                 |                 |                 | 0.037           | -0.058          | -0.095          | 0.084           | -0.088          | -0.172          | 0.043           | -0.085          | -0.128          | 0.7000 |
| 0.8000                    | 0.009           | -0.063          | -0.073          | 0.009           | -0.058          | -0.066          | 0.011           | -0.057          | -0.068          |                 |                 |                 | 0.011           | -0.056          | -0.068          | 0.070           | -0.093          | -0.163          | 0.040           | -0.086          | -0.126          | 0.8000 |
| 0.9000                    | 0.013           | -0.060          | -0.073          | 0.006           | -0.058          | -0.064          | 0.008           | -0.057          | -0.065          |                 |                 |                 | -0.014          | -0.051          | -0.037          | 0.061           | -0.089          | -0.150          | 0.035           | -0.087          | -0.122          | 0.9000 |
| 1.0000                    | 0.051           | -0.036          | -0.088          | 0.005           | -0.052          | -0.057          | 0.005           | -0.055          | -0.060          |                 |                 |                 | -0.039          | -0.042          | -0.003          | 0.058           | -0.076          | -0.133          | 0.030           | -0.087          | -0.116          | 1.0000 |
| M = 2.232      α = 00.30  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.162           | 0.108           | -0.054          | 0.151           | 0.133           | -0.017          | 0.125           | 0.151           | 0.027           |                 |                 |                 | 0.150           | 0.162           | 0.011           | 0.147           | 0.184           | 0.037           | 0.131           | 0.105           |                 | 0.0000 |
| 0.0125                    | 0.105           | 0.087           | -0.019          | 0.100           | 0.095           | -0.006          | 0.096           | 0.107           | 0.011           | 0.090           | 0.113           | 0.024           | 0.107           | 0.123           | 0.015           | 0.113           | 0.139           | 0.026           | 0.105           |                 |                 | 0.0125 |
| 0.0250                    | 0.066           | 0.069           | 0.003           | 0.064           | 0.065           | 0.001           | 0.071           | 0.074           | 0.003           | 0.066           | 0.083           | 0.017           | 0.076           | 0.091           | 0.016           | 0.087           | 0.104           | 0.017           | 0.083           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.038           | 0.043           | 0.005           | 0.032           | 0.032           | 0.000           | 0.033           | 0.039           | 0.006           |                 | 0.044           |                 | 0.045           | 0.050           | 0.005           | 0.061           | 0.063           | 0.001           | 0.054           |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.032           | 0.029           | -0.004          | 0.021           | 0.023           | 0.002           | 0.020           | 0.022           | 0.002           | 0.016           | 0.027           | 0.011           | 0.023           | 0.030           | 0.007           | 0.036           | 0.042           | 0.006           | 0.041           |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.027           | 0.023           | -0.004          | 0.016           | 0.017           | 0.001           | 0.009           | 0.012           | 0.003           | 0.003           | 0.016           | 0.013           | 0.009           | 0.009           | 0.018           | 0.009           | 0.019           | 0.033           | 0.014           | 0.031           | 0.047           | 0.1000 |
| 0.1500                    | 0.012           | 0.020           | 0.007           | -0.001          | 0.010           | 0.011           | -0.002          | 0.004           | 0.005           | -0.006          | 0.003           | 0.003           | -0.004          | 0.004           | 0.007           | -0.002          | 0.016           | 0.018           | 0.016           | 0.037           | 0.021           | 0.1500 |
| 0.2000                    | 0.003           | 0.015           | 0.012           | -0.004          | 0.006           | 0.010           | -0.008          | 0.122           | 0.130           | -0.017          |                 |                 | -0.011          | -0.006          | 0.005           | -0.005          | 0.004           | 0.009           | -0.002          | 0.026           | 0.028           | 0.2000 |
| 0.3000                    | 0.005           | -0.002          | -0.007          | -0.009          | 0.021           | 0.029           | -0.014          | -0.004          | 0.010           |                 |                 |                 | -0.019          | -0.007          | 0.013           | -0.021          | -0.015          | 0.007           | 0.000           | 0.008           | 0.008           | 0.3000 |
| 0.4000                    | -0.021          | -0.004          | 0.018           | -0.019          | -0.010          | 0.009           | -0.018          | -0.014          | 0.004           |                 |                 |                 | -0.021          | -0.007          | 0.014           | -0.023          | -0.020          | 0.002           | -0.022          | -0.005          | 0.018           | 0.4000 |
| 0.5000                    | -0.021          | -0.016          | 0.006           | -0.023          | -0.019          | 0.004           | -0.023          | -0.017          | 0.005           |                 |                 |                 | -0.024          | -0.018          | 0.006           | -0.033          | -0.031          | 0.002           | -0.031          | -0.012          | 0.019           | 0.5000 |
| 0.6000                    | 0.016           | -0.022          | -0.037          | -0.027          | -0.025          | 0.003           | -0.029          | -0.027          | 0.002           |                 |                 |                 | -0.030          | -0.023          | 0.007           | -0.024          | -0.029          | -0.005          | -0.036          | -0.024          | 0.012           | 0.6000 |
| 0.7000                    | 0.006           | -0.023          | -0.029          | -0.031          | -0.027          | 0.005           | -0.029          | -0.025          | 0.004           |                 |                 |                 | -0.019          | -0.025          | -0.006          | 0.021           | -0.028          | -0.049          | -0.041          | -0.029          | 0.012           | 0.7000 |
| 0.8000                    | -0.029          | -0.043          | -0.014          | -0.033          | -0.034          | -0.001          | -0.031          | -0.031          |                 |                 |                 |                 | -0.043          | -0.028          | 0.015           | 0.021           | -0.036          | -0.057          | -0.043          | -0.035          | 0.008           | 0.8000 |
| 0.9000                    | -0.026          | -0.036          | -0.010          | -0.030          | -0.039          | -0.008          | -0.034          | -0.038          | -0.004          |                 |                 |                 | -0.065          | -0.032          | 0.033           | 0.017           | -0.041          | -0.058          | -0.046          | -0.035          | 0.011           | 0.9000 |
| 1.0000                    | 0.014           | -0.004          | -0.018          | -0.022          | -0.040          | -0.018          | -0.039          | -0.046          | -0.007          |                 |                 |                 | -0.086          | -0.039          | 0.047           | 0.010           | -0.042          | -0.051          | -0.050          | -0.029          | 0.021           | 1.0000 |
| M = 2.232      α = 04.36  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.007           | 0.264           | 0.257           | -0.010          | 0.296           | 0.306           | -0.027          | 0.305           | 0.331           |                 |                 |                 | -0.028          | 0.308           | 0.336           | -0.014          | 0.322           | 0.336           | -0.021          | 0.267           |                 | 0.0000 |
| 0.0125                    | -0.015          | 0.216           | 0.232           | -0.029          | 0.232           | 0.261           | -0.037          | 0.238           | 0.275           | -0.052          | 0.243           | 0.295           | -0.035          | 0.254           | 0.289           | -0.031          | 0.269           | 0.300           | -0.047          |                 |                 | 0.0125 |
| 0.0250                    | -0.030          | 0.179           | 0.210           | -0.043          | 0.184           | 0.227           | -0.047          | 0.189           | 0.236           | -0.056          | 0.198           | 0.254           | -0.042          | 0.211           | 0.253           | -0.042          | 0.229           | 0.271           | -0.063          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.039          | 0.137           | 0.176           | -0.061          | 0.137           | 0.197           | -0.065          | 0.144           | 0.209           |                 | 0.153           |                 | -0.054          | 0.156           | 0.210           | -0.048          | 0.183           | 0.231           | -0.066          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.041          | 0.111           | 0.151           | -0.061          | 0.115           | 0.176           | -0.073          | 0.117           | 0.190           | -0.076          | 0.127           | 0.203           | -0.067          | 0.135           | 0.202           | -0.059          | 0.152           | 0.211           | -0.070          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.041          | 0.100           | 0.141           | -0.057          | 0.104           | 0.161           | -0.075          | 0.102           | 0.178           | -0.082          | 0.111           | 0.193           | -0.077          | 0.118           | 0.195           | -0.070          | 0.140           | 0.211           | -0.071          | 0.163           | 0.235           | 0.1000 |
| 0.1500                    | -0.046          | 0.088           | 0.134           | -0.062          | 0.088           | 0.150           | -0.075          | 0.084           | 0.159           | -0.086          | 0.089           | 0.175           | -0.085          | 0.094           | 0.178           | -0.084          | 0.114           | 0.198           | -0.077          | 0.148           | 0.225           | 0.1500 |
| 0.2000                    | -0.052          | 0.079           | 0.131           | -0.063          | 0.080           | 0.143           | -0.075          | 0.176           | 0.251           | -0.087          |                 |                 | -0.087          | 0.079           | 0.167           | -0.082          | 0.100           | 0.182           | -0.091          | 0.131           | 0.223           | 0.2000 |
| 0.3000                    | -0.039          | 0.057           | 0.096           | -0.063          | 0.081           | 0.145           | -0.080          | 0.061           | 0.141           |                 |                 |                 | -0.090          | 0.069           | 0.159           | -0.097          | 0.074           | 0.171           | -0.079          | 0.109           | 0.188           | 0.3000 |
| 0.4000                    | -0.061          | 0.051           | 0.111           | -0.061          | 0.047           | 0.109           | -0.072          | 0.041           | 0.113           |                 |                 |                 | -0.091          | 0.056           | 0.148           | -0.097          | 0.065           | 0.162           | -0.099          | 0.088           | 0.186           | 0.4000 |
| 0.5000                    | -0.060          | 0.039           | 0.099           | -0.062          | 0.035           | 0.097           | -0.069          | 0.036           | 0.105           |                 |                 |                 | -0.087          | 0.038           | 0.125           | -0.102          | 0.056           | 0.159           | -0.104          | 0.074           | 0.178           | 0.5000 |
| 0.6000                    | -0.014          | 0.027           | 0.041           | -0.062          | 0.023           | 0.085           | -0.072          | 0.022           | 0.094           |                 |                 |                 | -0.079          | 0.032           | 0.111           | -0.097          | 0.045           | 0.142           | -0.107          | 0.061           | 0.169           | 0.6000 |
| 0.7000                    | -0.019          | 0.024           | 0.043           | -0.064          | 0.018           | 0.082           | -0.067          | 0.021           | 0.088           |                 |                 |                 | -0.069          | 0.027           | 0.096           | -0.080          | 0.036           | 0.116           | -0.109          | 0.054           | 0.161           | 0.7000 |
| 0.8000                    | -0.059          | -0.001          | 0.057           | -0.064          | 0.010           | 0.074           | -0.069          | 0.014           | 0.083           |                 |                 |                 | -0.093          | 0.022           | 0.115           | -0.057          | 0.027           | 0.084           | -0.111          | 0.050           | 0.161           | 0.8000 |
| 0.9000                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Concluded

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 2.229      α = 08.31 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.102          | 0.378           | 0.480           | -0.094          | 0.383           | 0.477           | -0.108          | 0.399           | 0.507           | -0.123          | 0.345           | 0.468           | -0.126          | 0.407           | 0.533           | -0.101          | 0.412           | 0.513           | -0.095          | 0.342           |                 | 0.0000 |
| 0.0125                   | -0.105          | 0.323           | 0.428           | -0.106          | 0.328           | 0.434           | -0.112          | 0.334           | 0.446           | -0.123          | 0.345           | 0.468           | -0.115          | 0.354           | 0.469           | -0.109          | 0.368           | 0.477           | -0.123          |                 | 0.0125          |        |
| 0.0250                   | -0.106          | 0.280           | 0.386           | -0.114          | 0.284           | 0.398           | -0.116          | 0.286           | 0.402           | -0.125          | 0.301           | 0.426           | -0.109          | 0.313           | 0.422           | -0.114          | 0.332           | 0.446           | -0.138          |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.103          | 0.227           | 0.330           | -0.122          | 0.230           | 0.352           | -0.125          | 0.237           | 0.362           | -0.117          | 0.257           | -0.117          | 0.263           | 0.380           | -0.114          | 0.288           | 0.402           | -0.133          | 0.314           |                 | 0.0500          |        |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.106          | 0.198           | 0.304           | -0.120          | 0.204           | 0.324           | -0.126          | 0.209           | 0.336           | -0.130          | 0.223           | 0.353           | -0.124          | 0.234           | 0.358           | -0.119          | 0.257           | 0.376           | -0.134          | 0.298           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.109          | 0.186           | 0.296           | -0.118          | 0.189           | 0.307           | -0.125          | 0.191           | 0.317           | -0.135          | 0.204           | 0.338           | -0.128          | 0.214           | 0.342           | -0.123          | 0.240           | 0.363           | -0.132          | 0.272           | 0.404           | 0.1000 |
| 0.1500                   | -0.114          | 0.162           | 0.276           | -0.120          | 0.164           | 0.284           | -0.125          | 0.173           | 0.298           | -0.134          | 0.178           | 0.312           | -0.131          | 0.186           | 0.317           | -0.136          | 0.208           | 0.345           | -0.133          | 0.252           | 0.384           | 0.1500 |
| 0.2000                   | -0.090          | 0.148           | 0.238           | -0.120          | 0.156           | 0.275           | -0.126          | 0.242           | 0.368           | -0.133          |                 |                 | -0.133          | 0.169           | 0.302           | -0.127          | 0.191           | 0.318           | -0.145          | 0.232           | 0.377           | 0.2000 |
| 0.3000                   | -0.082          | 0.119           | 0.201           | -0.127          | 0.142           | 0.268           | -0.132          | 0.130           | 0.262           |                 |                 |                 | -0.131          | 0.146           | 0.277           | -0.140          | 0.163           | 0.303           | -0.124          | 0.203           | 0.327           | 0.3000 |
| 0.4000                   | -0.093          | 0.112           | 0.205           | -0.124          | 0.113           | 0.237           | -0.129          | 0.106           | 0.235           |                 |                 |                 | -0.134          | 0.125           | 0.259           | -0.140          | 0.148           | 0.288           | -0.143          | 0.179           | 0.322           | 0.4000 |
| 0.5000                   | -0.089          | 0.096           | 0.186           | -0.114          | 0.094           | 0.208           | -0.122          | 0.099           | 0.221           |                 |                 |                 | -0.136          | 0.107           | 0.242           | -0.140          | 0.132           | 0.271           | -0.148          | 0.166           | 0.314           | 0.5000 |
| 0.6000                   | -0.032          | 0.083           | 0.114           | -0.102          | 0.080           | 0.182           | -0.118          | 0.082           | 0.200           |                 |                 |                 | -0.127          | 0.097           | 0.224           | -0.136          | 0.116           | 0.252           | -0.149          | 0.148           | 0.297           | 0.6000 |
| 0.7000                   | -0.034          | 0.078           | 0.112           | -0.092          | 0.071           | 0.163           | -0.113          | 0.079           | 0.192           |                 |                 |                 | -0.116          | 0.089           | 0.206           | -0.129          | 0.107           | 0.236           | -0.145          | 0.148           | 0.285           | 0.7000 |
| 0.8000                   | -0.078          | 0.050           | 0.128           | -0.088          | 0.059           | 0.147           | -0.109          | 0.068           | 0.177           |                 |                 |                 | -0.132          | 0.082           | 0.214           | -0.122          | 0.098           | 0.221           | -0.138          | 0.132           | 0.270           | 0.8000 |
| 0.9000                   | -0.083          | 0.058           | 0.141           | -0.083          | 0.057           | 0.141           | -0.107          | 0.059           | 0.166           |                 |                 |                 | -0.145          | 0.072           | 0.216           | -0.115          | 0.087           | 0.201           | -0.134          | 0.133           | 0.267           | 0.9000 |
| 1.0000                   | -0.049          | 0.103           | 0.152           | -0.079          | 0.065           | 0.144           | -0.105          | 0.052           | 0.157           |                 |                 |                 | -0.154          | 0.059           | 0.213           | -0.106          | 0.072           | 0.179           | -0.133          | 0.144           | 0.276           | 1.0000 |
| M = 2.232      α = 12.41 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.161          | 0.433           | 0.594           | -0.145          | 0.437           | 0.583           | -0.160          | 0.445           | 0.605           | -0.180          | 0.425           | 0.590           | -0.163          | 0.420           | 0.583           | -0.152          | 0.445           | 0.597           | -0.146          | 0.424           |                 | 0.0000 |
| 0.0125                   | -0.156          | 0.407           | 0.563           | -0.153          | 0.402           | 0.555           | -0.162          | 0.399           | 0.560           | -0.165          | 0.425           | 0.590           | -0.163          | 0.420           | 0.583           | -0.152          | 0.445           | 0.597           | -0.146          | 0.424           |                 | 0.0125 |
| 0.0250                   | -0.153          | 0.379           | 0.539           | -0.159          | 0.371           | 0.530           | -0.164          | 0.364           | 0.527           | -0.167          | 0.393           | 0.561           | -0.154          | 0.391           | 0.545           | -0.157          | 0.411           | 0.567           | -0.179          |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.149          | 0.320           | 0.469           | -0.163          | 0.322           | 0.485           | -0.168          | 0.326           | 0.494           |                 | 0.346           |                 | -0.161          | 0.349           | 0.510           | -0.157          | 0.378           | 0.534           | -0.173          | 0.399           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.154          | 0.287           | 0.441           | -0.162          | 0.294           | 0.456           | -0.167          | 0.300           | 0.467           | -0.167          | 0.311           | 0.478           | -0.165          | 0.324           | 0.489           | -0.158          | 0.351           | 0.509           | -0.173          | 0.384           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.156          | 0.275           | 0.431           | -0.160          | 0.270           | 0.430           | -0.166          | 0.286           | 0.452           | -0.167          | 0.294           | 0.462           | -0.169          | 0.301           | 0.470           | -0.161          | 0.334           | 0.495           | -0.170          | 0.361           | 0.530           | 0.1000 |
| 0.1500                   | -0.160          | 0.250           | 0.410           | -0.160          | 0.248           | 0.408           | -0.166          | 0.260           | 0.426           | -0.167          | 0.264           | 0.430           | -0.167          | 0.275           | 0.442           | -0.172          | 0.302           | 0.473           | -0.168          | 0.340           | 0.507           | 0.1500 |
| 0.2000                   | -0.156          | 0.226           | 0.382           | -0.159          | 0.240           | 0.399           | -0.166          | 0.310           | 0.477           | -0.166          |                 |                 | -0.167          | 0.258           | 0.425           | -0.159          | 0.286           | 0.444           | -0.184          | 0.321           | 0.505           | 0.2000 |
| 0.3000                   | -0.148          | 0.194           | 0.342           | -0.162          | 0.216           | 0.377           | -0.168          | 0.206           | 0.375           |                 |                 |                 | -0.166          | 0.221           | 0.387           | -0.169          | 0.251           | 0.421           | -0.195          | 0.292           | 0.447           | 0.3000 |
| 0.4000                   | -0.137          | 0.189           | 0.326           | -0.162          | 0.187           | 0.349           | -0.166          | 0.183           | 0.349           |                 |                 |                 | -0.166          | 0.200           | 0.366           | -0.168          | 0.235           | 0.403           | -0.177          | 0.270           | 0.446           | 0.4000 |
| 0.5000                   | -0.119          | 0.162           | 0.281           | -0.161          | 0.163           | 0.325           | -0.158          | 0.166           | 0.324           |                 |                 |                 | -0.168          | 0.184           | 0.352           | -0.170          | 0.213           | 0.384           | -0.179          | 0.254           | 0.432           | 0.5000 |
| 0.6000                   | -0.049          | 0.153           | 0.202           | -0.154          | 0.136           | 0.283           | -0.162          | 0.145           | 0.307           |                 |                 |                 | -0.164          | 0.170           | 0.335           | -0.170          | 0.198           | 0.367           | -0.177          | 0.233           | 0.410           | 0.6000 |
| 0.7000                   | -0.051          | 0.144           | 0.195           | -0.147          | 0.128           | 0.259           | -0.161          | 0.137           | 0.298           |                 |                 |                 | -0.156          | 0.158           | 0.314           | -0.165          | 0.186           | 0.351           | -0.175          | 0.224           | 0.400           | 0.7000 |
| 0.8000                   | -0.097          | 0.117           | 0.214           | -0.131          | 0.128           | 0.259           | -0.161          | 0.137           | 0.298           |                 |                 |                 | -0.162          | 0.151           | 0.313           | -0.163          | 0.171           | 0.334           | -0.173          | 0.214           | 0.387           | 0.8000 |
| 0.9000                   | -0.105          | 0.117           | 0.222           | -0.116          | 0.120           | 0.236           | -0.163          | 0.123           | 0.286           |                 |                 |                 | -0.173          | 0.135           | 0.308           | -0.163          | 0.157           | 0.320           | -0.170          | 0.214           | 0.384           | 0.9000 |
| 1.0000                   | -0.076          | 0.144           | 0.220           | -0.102          | 0.113           | 0.214           | -0.170          | 0.102           | 0.272           |                 |                 |                 | -0.188          | 0.111           | 0.299           | -0.165          | 0.145           | 0.310           | -0.166          | 0.224           | 0.390           | 1.0000 |
| M = 2.232      α = 16.32 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.185          | 0.483           | 0.669           | -0.187          | 0.489           | 0.676           | -0.181          | 0.483           | 0.663           | -0.182          | 0.479           | 0.662           | -0.214          | 0.499           | 0.714           | -0.174          | 0.474           | 0.648           | -0.158          | 0.430           |                 | 0.0000 |
| 0.0125                   | -0.179          | 0.470           | 0.649           | -0.184          | 0.466           | 0.669           | -0.183          | 0.469           | 0.652           | -0.182          | 0.479           | 0.662           | -0.187          | 0.483           | 0.670           | -0.174          | 0.484           | 0.658           | -0.180          |                 | 0.0125          |        |
| 0.0250                   | -0.175          | 0.454           | 0.629           | -0.182          | 0.443           | 0.625           | -0.184          | 0.455           | 0.640           | -0.186          | 0.469           | 0.655           | -0.173          | 0.467           | 0.640           | -0.174          | 0.487           | 0.661           | -0.192          |                 | 0.0250          |        |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |        |
| 0.0500                   | -0.173          | 0.414           | 0.587           | -0.183          | 0.397           | 0.580           | -0.186          | 0.430           | 0.616           |                 | 0.433           |                 | -0.181          | 0.437           | 0.618           | -0.174          | 0.467           | 0.641           | -0.186          | 0.467           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |        |
| 0.0750                   | -0.177          | 0.374           | 0.551           | -0.182          | 0.382           | 0.564           | -0.184          | 0.398           | 0.582           | -0.181          | 0.401           | 0.583           | -0.184          | 0.420           | 0.604           | -0.175          | 0.446           | 0.621           | -0.184          | 0.453           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |        |
| 0.1000                   | -0.178          | 0.367           | 0.545           | -0.180          | 0.359           | 0.539           | -0.183          | 0.384           | 0.567           | -0.181          | 0.385           | 0.566           | -0.186          | 0.398           | 0.585           | -0.176          | 0.434           | 0.610           | -0.182          | 0.447           | 0.629           | 0.1000 |
| 0.1500                   | -0.182          | 0.337           | 0.519           | -0.179          | 0.342           | 0.521           | -0.184          | 0.345           | 0.529           | -0.180          | 0.356           | 0.536           | -0.183          | 0.370           | 0.553           | -0.189          | 0.406           | 0.595           | -0.180          | 0.427           | 0.607           | 0.1500 |
| 0.2000                   | -0.181          | 0.307           | 0.488           | -0.179          | 0.329           | 0.508           | -0.184          | 0.329           | 0.512           | -0.180          |                 |                 | -0.185          | 0.346           | 0.532           | -0.172          | 0.384           | 0.556           | -0.196          | 0.414           | 0.610           | 0.2000 |
| 0.3000                   | -0.170          | 0.291           | 0.461           | -0.181          | 0.299           | 0.480           | -0.183          | 0.290           | 0.474           |                 |                 |                 | -0.183          | 0.304           | 0.487           | -0.186          | 0.324           | 0.528           | -0.167          | 0.385           | 0.552           | 0.3000 |
| 0.4000                   | -0.156          | 0.260           | 0.416           | -0.182          | 0.266           | 0.447           | -0.181          | 0.264           | 0.445           |                 |                 |                 | -0.181          | 0.291           | 0.472           | -0.186          | 0.301           | 0.487           | -0.192          | 0.346           | 0.538           | 0.4000 |
| 0.5000                   | -0.142          | 0.247           | 0.389           | -0.180          | 0.244           | 0.424           | -0.177          | 0.246           | 0.423           |                 |                 |                 | -0.183          | 0.267           | 0.451           | -0.186          | 0.282           | 0.468           | -0.192          | 0.324           | 0.516           | 0.5000 |
| 0.6000                   | -0.065          | 0.228           | 0.294           | -0.175          | 0.225           | 0.400           | -0.181          | 0.234           | 0.415           |                 |                 |                 | -0.180          | 0.253           | 0.433           | -0.186          | 0.282           | 0.468           | -0.192          | 0.324           | 0.516           | 0.6000 |
| 0.7000                   | -0.065          | 0.233           | 0.298           | -0.168          | 0.221           | 0.388           | -0.181          | 0.229           | 0.410           |                 |                 |                 | -0.175          | 0.243           | 0.418           | -0.183          | 0.267           | 0.450           | -0.190          | 0.312           | 0.502           | 0.7000 |
| 0.8000                   | -0.117          | 0.189           | 0.306           | -0.155          | 0.201           | 0.356           | -0.180          | 0.214           | 0.394           |                 |                 |                 | -0.175          | 0.226           | 0.401           | -0.182          | 0.251           | 0.433           |                 |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$

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| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.699      α = -04.10 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.082           | -0.125          | -0.206          | 0.169           | -0.329          | -0.498          | 0.208           | -0.463          | -0.671          |                 |                 |                 | 0.287           | -0.718          | -1.006          | 0.134           | -0.775          | -0.908          | 0.198           | -0.683          |                 | 0.0000 |
| 0.0125                    | 0.089           | -0.143          | -0.232          | 0.125           | -0.302          | -0.427          | 0.164           | -0.498          | -0.662          | 0.173           | -0.691          | -0.864          | 0.213           | -0.771          | -0.984          | 0.193           | -0.779          | -0.972          | 0.233           |                 |                 | 0.0125 |
| 0.0250                    | 0.085           | -0.155          | -0.240          | 0.093           | -0.278          | -0.370          | 0.128           | -0.478          | -0.606          | 0.144           | -0.447          | -0.591          | 0.159           | -0.733          | -0.893          | 0.216           | -0.782          | -0.998          | 0.246           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.664          |                 | 0.0420 |
| 0.0500                    | 0.050           | -0.156          | -0.205          | 0.061           | -0.240          | -0.301          | 0.078           | -0.271          | -0.349          |                 |                 |                 | 0.110           | -0.387          | -0.497          | 0.158           | -0.784          | -0.942          | 0.202           |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.662          |                 | 0.0640 |
| 0.0750                    | 0.031           | -0.166          | -0.197          | 0.051           | -0.217          | -0.268          | 0.058           | -0.259          | -0.317          | 0.061           | -0.306          | -0.367          | 0.076           | -0.328          | -0.404          | 0.130           | -0.780          | -0.910          | 0.172           |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.662          |                 | 0.0810 |
| 0.1000                    | 0.027           | -0.181          | -0.208          | 0.034           | -0.212          | -0.246          | 0.035           | -0.242          | -0.277          | 0.040           | -0.282          | -0.323          | 0.054           | -0.300          | -0.354          | 0.098           | -0.761          | -0.860          | 0.153           | -0.663          | -0.816          | 0.1000 |
| 0.1500                    | 0.019           | -0.180          | -0.198          | 0.027           | -0.208          | -0.235          | 0.021           | -0.233          | -0.255          | 0.022           | -0.264          | -0.287          | 0.031           | -0.273          | -0.304          | 0.069           | -0.610          | -0.679          | 0.127           | -0.664          | -0.792          | 0.1500 |
| 0.2000                    | 0.012           | -0.188          | -0.200          | 0.016           | -0.199          | -0.215          | 0.015           | -0.200          | -0.215          | 0.011           |                 |                 | 0.018           | -0.256          | -0.275          | 0.059           | -0.435          | -0.493          | 0.107           | -0.664          | -0.771          | 0.2000 |
| 0.3000                    | 0.005           | -0.198          | -0.203          | 0.006           | -0.200          | -0.206          | 0.002           | -0.210          | -0.208          |                 |                 |                 | 0.010           | -0.233          | -0.242          | 0.055           | -0.253          | -0.307          | 0.076           | -0.676          | -0.751          | 0.3000 |
| 0.4000                    | -0.013          | -0.201          | -0.188          | -0.002          | -0.196          | -0.194          | -0.006          | -0.200          | -0.194          |                 |                 |                 | 0.002           | -0.207          | -0.209          | 0.048           | -0.222          | -0.270          | 0.054           | -0.677          | -0.731          | 0.4000 |
| 0.5000                    | -0.016          | -0.197          | -0.181          | -0.009          | -0.188          | -0.179          | -0.009          | -0.185          | -0.176          |                 |                 |                 | 0.004           | -0.188          | -0.191          | 0.065           | -0.196          | -0.262          | 0.042           | -0.641          | -0.683          | 0.5000 |
| 0.6000                    | -0.015          | -0.169          | -0.155          | -0.012          | -0.171          | -0.159          | -0.016          | -0.165          | -0.149          |                 |                 |                 | 0.005           | -0.163          | -0.168          | 0.056           | -0.169          | -0.225          | 0.027           | -0.527          | -0.555          | 0.6000 |
| 0.7000                    | -0.014          | -0.149          | -0.135          | -0.020          | -0.150          | -0.130          | -0.035          | -0.140          | -0.105          |                 |                 |                 | -0.070          | -0.140          | -0.070          | 0.028           | -0.134          | -0.162          | 0.018           | -0.392          | -0.410          | 0.7000 |
| 0.8000                    | -0.057          | -0.126          | -0.069          | -0.052          | -0.128          | -0.075          | -0.079          | -0.108          | -0.030          |                 |                 |                 | -0.110          | -0.103          | 0.007           | 0.017           | -0.107          | -0.124          | 0.008           | -0.194          | -0.206          | 0.8000 |
| 0.9000                    | -0.066          | -0.091          | -0.026          | -0.063          | -0.088          | -0.025          | -0.073          | -0.063          | 0.010           |                 |                 |                 | -0.076          | -0.054          | 0.022           | 0.013           | -0.054          | -0.067          | -0.018          | -0.065          | -0.047          | 0.9000 |
| 1.0000                    | -0.040          | -0.046          | -0.006          | -0.053          | -0.031          | 0.022           | -0.019          | -0.004          | 0.015           |                 |                 |                 | -0.031          | 0.005           | -0.026          | 0.017           | 0.025           | 0.008           | -0.060          | -0.004          | 0.056           | 1.0000 |
| M = 0.700      α = -00.05 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.143           | -0.064          | -0.207          | -0.023          | -0.136          | -0.113          | 0.013           | -0.078          | -0.091          |                 |                 |                 | -0.027          | -0.037          | -0.010          | -0.033          | -0.046          | -0.013          | 0.000           | -0.153          |                 | 0.0000 |
| 0.0125                    | 0.042           | -0.052          | -0.094          | -0.029          | -0.105          | -0.075          | -0.032          | -0.086          | -0.054          | -0.076          | -0.074          | 0.002           | -0.074          | -0.072          | 0.002           | -0.073          | -0.085          | -0.013          | -0.030          |                 |                 | 0.0125 |
| 0.0250                    | -0.026          | -0.048          | -0.023          | -0.037          | -0.087          | -0.050          | -0.066          | -0.093          | -0.027          | -0.100          | -0.095          | 0.005           | -0.104          | -0.097          | 0.007           | -0.101          | -0.114          | -0.013          | -0.054          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.160          |                 | 0.0420 |
| 0.0500                    | -0.061          | -0.066          | -0.005          | -0.060          | -0.094          | -0.035          | -0.098          | -0.101          | -0.003          |                 |                 |                 | -0.117          | -0.118          | -0.001          | -0.125          | -0.140          | -0.015          | -0.081          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.157          |                 | 0.0640 |
| 0.0750                    | -0.062          | -0.076          | -0.014          | -0.083          | -0.099          | -0.016          | -0.104          | -0.109          | -0.005          | -0.118          | -0.124          | -0.005          | -0.124          | -0.120          | 0.005           | -0.137          | -0.140          | -0.002          | -0.091          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.152          |                 | 0.0810 |
| 0.1000                    | -0.072          | -0.081          | -0.009          | -0.091          | -0.104          | -0.012          | -0.111          | -0.112          |                 | -0.128          | -0.124          | 0.004           | -0.130          | -0.124          | 0.006           | -0.135          | -0.142          | -0.007          | -0.096          | -0.146          | -0.051          | 0.1000 |
| 0.1500                    | -0.085          | -0.083          | 0.002           | -0.101          | -0.106          | -0.005          | -0.114          | -0.115          | -0.001          | -0.129          | -0.127          | 0.002           | -0.129          | -0.125          | 0.003           | -0.133          | -0.141          | -0.009          | -0.095          | -0.142          | -0.047          | 0.1500 |
| 0.2000                    | -0.089          | -0.087          | 0.002           | -0.101          | -0.106          | -0.005          | -0.110          | -0.095          | 0.015           | -0.128          |                 |                 | -0.122          | -0.127          | -0.005          | -0.122          | -0.139          | -0.017          | -0.090          | -0.145          | -0.055          | 0.2000 |
| 0.3000                    | -0.101          | -0.099          | 0.001           | -0.104          | -0.108          | -0.004          | -0.115          | -0.118          | -0.003          |                 |                 |                 | -0.119          | -0.124          | -0.005          | -0.100          | -0.135          | -0.035          | -0.084          | -0.140          | -0.056          | 0.3000 |
| 0.4000                    | -0.110          | -0.106          | 0.005           | -0.107          | -0.114          | -0.007          | -0.104          | -0.113          | -0.010          |                 |                 |                 | -0.106          | -0.117          | -0.011          | -0.059          | -0.133          | -0.074          | -0.080          | -0.130          | -0.050          | 0.4000 |
| 0.5000                    | -0.108          | -0.112          | -0.005          | -0.102          | -0.116          | -0.013          | -0.096          | -0.110          | -0.013          |                 |                 |                 | -0.093          | -0.109          | -0.016          | -0.011          | -0.124          | -0.112          | -0.073          | -0.115          | -0.042          | 0.5000 |
| 0.6000                    | -0.091          | -0.110          | -0.019          | -0.098          | -0.111          | -0.013          | -0.095          | -0.106          | -0.011          |                 |                 |                 | -0.079          | -0.099          | -0.020          | 0.002           | -0.109          | -0.111          | -0.065          | -0.101          | -0.036          | 0.6000 |
| 0.7000                    | -0.092          | -0.096          | -0.004          | -0.104          | -0.101          | 0.003           | -0.117          | -0.091          | 0.026           |                 |                 |                 | -0.175          | -0.089          | 0.086           | -0.004          | -0.098          | -0.094          | -0.055          | -0.086          | -0.031          | 0.7000 |
| 0.8000                    | -0.146          | -0.086          | 0.060           | -0.130          | -0.093          | 0.037           | -0.162          | -0.079          | 0.083           |                 |                 |                 | -0.210          | -0.072          | 0.138           | -0.004          | -0.070          | -0.066          | -0.043          | -0.063          | -0.020          | 0.8000 |
| 0.9000                    | -0.141          | -0.066          | 0.075           | -0.140          | -0.062          | 0.078           | -0.138          | -0.049          | 0.089           |                 |                 |                 | -0.149          | -0.040          | 0.108           | 0.003           | -0.035          | -0.037          | -0.025          | -0.033          | -0.009          | 0.9000 |
| 1.0000                    | -0.075          | -0.035          | 0.041           | -0.133          | -0.006          | 0.127           | -0.045          | -0.001          | 0.044           |                 |                 |                 | -0.008          | 0.005           | -0.004          | 0.016           | 0.009           | -0.007          | 0.000           | 0.004           | 0.003           | 1.0000 |
| M = 0.699      α = 03.96  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.023           | 0.052           | 0.030           | -0.273          | 0.120           | 0.393           | -0.724          | 0.216           | 0.940           |                 |                 |                 | -0.719          | 0.265           | 0.985           | -0.806          | 0.240           | 1.045           | -0.617          | -0.155          |                 | 0.0000 |
| 0.0125                    | -0.069          | 0.057           | 0.126           | -0.259          | 0.098           | 0.356           | -0.477          | 0.151           | 0.628           | -0.666          | 0.188           | 0.854           | -0.744          | 0.198           | 0.942           | -0.835          | 0.222           | 1.057           | -0.607          |                 |                 | 0.0125 |
| 0.0250                    | -0.131          | 0.054           | 0.184           | -0.247          | 0.078           | 0.325           | -0.319          | 0.105           | 0.423           | -0.517          | 0.134           | 0.651           | -0.695          | 0.147           | 0.843           | -0.848          | 0.201           | 1.049           | -0.601          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.151           |                 | 0.0420 |
| 0.0500                    | -0.160          | 0.025           | 0.185           | -0.230          | 0.049           | 0.279           | -0.272          | 0.067           | 0.339           |                 |                 | 0.080           | -0.379          | 0.098           | 0.477           | -0.829          | 0.147           | 0.976           | -0.602          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.184           |                 | 0.0640 |
| 0.0750                    | -0.168          | 0.011           | 0.179           | -0.220          | 0.033           | 0.253           | -0.254          | 0.041           | 0.295           | -0.305          | 0.050           | 0.355           | -0.342          | 0.067           | 0.409           | -0.761          | 0.106           | 0.867           | -0.600          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.150           |                 | 0.0810 |
| 0.1000                    | -0.178          | 0.008           | 0.186           | -0.216          | 0.019           | 0.235           | -0.250          | 0.028           | 0.278           | -0.304          | 0.035           | 0.339           | -0.317          | 0.047           | 0.364           | -0.622          | 0.084           | 0.705           | -0.599          | 0.131           | -0.730          | 0.1000 |
| 0.1500                    | -0.198          | 0.008           | 0.206           | -0.217          | 0.014           | 0.231           | -0.232          | 0.009           | 0.241           | -0.264          | 0.013           | 0.277           | -0.284          | 0.021           | 0.305           | -0.421          | 0.052           | 0.473           | -0.597          | 0.097           | 0.694           | 0.1500 |
| 0.2000                    | -0.209          | 0.005           | 0.214           | -0.218          | 0.008           | 0.226           | -0.218          | 0.022           | 0.240           | -0.244          |                 |                 | -0.258          | 0.006           | 0.264           | -0.305          | 0.033           | 0.338           | -0.592          | 0.077           | 0.669           | 0.2000 |
| 0.3000                    | -0.218          | -0.014          | 0.203           | -0.213          | -0.007          | 0.205           | -0.214          | -0.014          | 0.200           |                 |                 |                 | -0.229          | -0.007          | 0.222           | -0.222          | 0.005           | 0.227           | -0.585          | 0.046           | 0.631           | 0.3000 |
| 0.4000                    | -0.219          | -0.026          | 0.194           | -0.213          | -0.020          | 0.193           | -0.195          | -0.026          | 0.169           |                 |                 |                 | -0.202          | -0.016          | 0.186           | -0.159          | -0.008          | 0.152           | -0.546          | 0.021           | 0.568           | 0.4000 |
| 0.5000                    | -0.201          | -0.035          | 0.166           | -0.197          | -0.031          | 0.167           | -0.179          | -0.035          | 0.144           |                 |                 |                 | -0.178          | -0.026          | 0.152           | -0.093          | -0.005          | 0.088           | -0.459          | 0.011           | 0.470           | 0.5000 |
| 0.6000                    | -0.179          | -0.039          | 0.140           | -0.174          | -0.038          | 0.136           | -0.167          | -0.038          | 0.129           |                 |                 |                 | -0.164          | -0.034          | 0.129           | -0.056          | -0.013          | 0.043           | -0.316          | -0.001          | 0.315           | 0.6000 |
| 0.7000                    | -0.165          | -0.040          | 0.125           | -0.171          | -0.044          | 0.127           | -0.183          | -0.038          | 0.145           |                 |                 |                 | -0.259          | -0.037          | 0.222           | -0.050          | -0.023          | 0.027           | -0.211          | -0.002          | 0.208           | 0.7000 |
| 0.8000                    | -0.198          | -0.044          | 0.153           | -0.197          | -0.045          | 0.152           | -0.221          | -0.039          | 0.182           |                 |                 |                 | -0.284          | -0.033          | 0.250           | -0.033          | -0.025          | 0.008           | -0.119          |                 | 0.119           | 0.8000 |
| 0.9000                    | -0.177          | -0.039          | 0.1             |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Continued

| x/c                        | 2y/b=0.200 |          |              | 2y/b=0.250 |          |              | 2y/b=0.300 |          |              | 2y/b=0.350 |          |              | 2y/b=0.400 |          |              | 2y/b=0.600 |          |              | 2y/b=0.800 |          |              | x/c    |
|----------------------------|------------|----------|--------------|------------|----------|--------------|------------|----------|--------------|------------|----------|--------------|------------|----------|--------------|------------|----------|--------------|------------|----------|--------------|--------|
|                            | $C_{pu}$   | $C_{pl}$ | $\Delta C_p$ | $C_{pu}$   | $C_{pl}$ | $\Delta C_p$ | $C_{pu}$   | $C_{pl}$ | $\Delta C_p$ | $C_{pu}$   | $C_{pl}$ | $\Delta C_p$ | $C_{pu}$   | $C_{pl}$ | $\Delta C_p$ | $C_{pu}$   | $C_{pl}$ | $\Delta C_p$ | $C_{pu}$   | $C_{pl}$ | $\Delta C_p$ |        |
| M = 0.700 $\alpha = 07.96$ |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |        |
| 0.0000                     | -0.631     | 0.238    | 0.869        | -0.979     | 0.231    | 1.210        | -0.955     | 0.254    | 1.209        | -0.956     | 0.240    | 1.196        | -0.860     | 0.137    | 0.997        | -0.601     | 0.240    |              |            |          |              | 0.0000 |
| 0.0125                     | -0.453     | 0.221    | 0.675        | -0.927     | 0.237    | 1.164        | -1.014     | 0.253    | 1.267        | -0.963     | 0.268    | 1.231        | -0.862     | 0.226    | 1.087        | -0.599     |          |              |            |          |              | 0.0125 |
| 0.0250                     | -0.346     | 0.205    | 0.551        | -0.808     | 0.234    | 1.041        | -1.073     | 0.246    | 1.319        | -0.979     | 0.280    | 1.259        | -0.862     | 0.251    | 1.287        | -0.597     |          |              |            |          |              | 0.0250 |
| 0.0420                     |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              | 0.0420 |
| 0.0500                     | -0.343     | 0.171    | 0.515        | -0.367     | 0.197    | 0.563        | -1.187     | 0.217    | 1.404        |            | 0.226    |              | -1.035     | 0.255    | 1.289        | -0.860     | 0.279    | 1.138        | -0.590     | 0.277    |              | 0.0500 |
| 0.0640                     |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              | 0.0640 |
| 0.0750                     | -0.329     | 0.160    | 0.490        | -0.367     | 0.179    | 0.545        | -0.644     | 0.194    | 0.539        | -1.385     | 0.196    | 1.581        | -1.229     | 0.224    | 1.453        | -0.873     | 0.248    | 1.120        | -0.588     | 0.280    |              | 0.0750 |
| 0.0810                     |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              | 0.0810 |
| 0.1000                     | -0.316     | 0.146    | 0.461        | -0.372     | 0.168    | 0.540        | -0.293     | 0.175    | 0.467        | -1.112     | 0.178    | 1.291        | -1.331     | 0.201    | 1.532        | -0.884     | 0.227    | 1.111        | -0.583     | 0.276    |              | 0.1000 |
| 0.1500                     | -0.327     | 0.141    | 0.467        | -0.358     | 0.147    | 0.504        | -0.338     | 0.151    | 0.490        | -0.253     | 0.150    | 0.403        | -1.151     | 0.173    | 1.324        | -0.912     | 0.191    | 1.102        | -0.574     | 0.252    | 0.835        | 0.1500 |
| 0.2000                     | -0.328     | 0.133    | 0.460        | -0.341     | 0.138    | 0.479        | -0.320     | 0.153    | 0.473        | -0.288     |          |              | -0.418     | 0.146    | 0.564        | -0.972     | 0.168    | 1.140        | -0.569     | 0.232    | 0.807        | 0.2000 |
| 0.3000                     | -0.318     | 0.104    | 0.422        | -0.322     | 0.112    | 0.434        | -0.310     | 0.106    | 0.416        |            |          |              | -0.224     | 0.115    | 0.339        | -1.150     | 0.128    | 1.278        | -0.566     | 0.208    | 0.777        | 0.3000 |
| 0.4000                     | -0.314     | 0.085    | 0.399        | -0.304     | 0.089    | 0.392        | -0.277     | 0.084    | 0.361        |            |          |              | -0.231     | 0.100    | 0.331        | -1.124     | 0.098    | 1.222        | -0.564     | 0.167    | 0.733        | 0.4000 |
| 0.5000                     | -0.284     | 0.071    | 0.355        | -0.278     | 0.065    | 0.342        | -0.241     | 0.067    | 0.308        |            |          |              | -0.205     | 0.079    | 0.284        | -0.895     | 0.084    | 0.979        | -0.532     | 0.132    | 0.696        | 0.5000 |
| 0.6000                     | -0.244     | 0.060    | 0.303        | -0.249     | 0.051    | 0.300        | -0.208     | 0.049    | 0.257        |            |          |              | -0.154     | 0.058    | 0.212        | -0.423     | 0.061    | 0.483        | -0.507     | 0.106    | 0.638        | 0.6000 |
| 0.7000                     | -0.205     | 0.047    | 0.252        | -0.220     | 0.037    | 0.258        | -0.191     | 0.037    | 0.228        |            |          |              | -0.119     | 0.041    | 0.160        | -0.358     | 0.047    | 0.100        | -0.516     | 0.069    | 0.576        | 0.7000 |
| 0.8000                     | -0.195     | 0.024    | 0.219        | -0.196     | 0.017    | 0.213        | -0.212     | 0.023    | 0.235        |            |          |              | -0.259     | 0.030    | 0.289        | 0.068      | 0.027    | -0.041       | -0.568     | 0.042    | 0.558        | 0.8000 |
| 0.9000                     | -0.181     | 0.015    | 0.196        | -0.169     | 0.016    | 0.185        | -0.170     | 0.021    | 0.191        |            |          |              | -0.172     | 0.032    | 0.204        | 0.099      | 0.021    | -0.078       | -0.601     | 0.012    | 0.581        | 0.9000 |
| 1.0000                     | -0.161     | 0.022    | 0.183        | -0.138     | 0.035    | 0.173        | -0.065     | 0.030    | 0.095        |            |          |              | -0.043     | 0.047    | 0.004        | 0.041      | 0.029    | -0.012       | -0.612     | -0.157   | 0.454        | 1.0000 |
| M = 0.698 $\alpha = 12.01$ |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |        |
| 0.0000                     | -2.135     | 0.280    | 2.415        | -1.130     | 0.229    | 1.360        | -1.310     | 0.134    | 1.444        | -1.307     | 0.176    | 1.483        | -1.237     | 0.082    | 1.319        | -0.968     | 0.027    | 0.994        | -0.340     | 0.120    |              | 0.0000 |
| 0.0125                     | -1.885     | 0.297    | 1.582        | -1.389     | 0.261    | 1.651        | -1.304     | 0.236    | 1.540        | -1.307     | 0.176    | 1.483        | -1.252     | 0.210    | 1.463        | -0.949     | 0.169    | 1.118        | -0.379     |          |              | 0.0125 |
| 0.0250                     | -0.735     | 0.305    | 1.040        | -1.575     | 0.284    | 1.859        | -1.339     | 0.297    | 1.636        | -1.313     | 0.278    | 1.591        | -1.262     | 0.291    | 1.554        | -0.937     | 0.263    | 1.199        | -0.404     |          |              | 0.0250 |
| 0.0420                     |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              | 0.0420 |
| 0.0500                     | -0.535     | 0.296    | 0.831        | -1.729     | 0.299    | 2.028        | -1.533     | 0.295    | 1.828        |            | 0.296    |              | -1.266     | 0.313    | 1.579        | -0.928     | 0.304    | 1.232        | -0.412     | 0.256    |              | 0.0500 |
| 0.0640                     |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              | 0.0640 |
| 0.0750                     | -0.515     | 0.286    | 0.801        | -0.567     | 0.281    | 0.848        | -1.590     | 0.279    | 1.868        | -1.410     | 0.282    | 1.691        | -1.297     | 0.302    | 1.599        | -0.916     | 0.314    | 1.229        | -0.425     | 0.272    |              | 0.0750 |
| 0.0810                     |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              | 0.0810 |
| 0.1000                     | -0.496     | 0.264    | 0.760        | -0.468     | 0.264    | 0.732        | -1.556     | 0.265    | 1.821        | -1.532     | 0.269    | 1.801        | -1.308     | 0.285    | 1.593        | -0.899     | 0.301    | 1.200        | -0.434     | 0.258    |              | 0.1000 |
| 0.1500                     | -0.495     | 0.241    | 0.736        | -0.474     | 0.242    | 0.716        | -0.710     | 0.234    | 0.944        | -1.652     | 0.240    | 1.891        | -1.587     | 0.255    | 1.842        | -0.885     | 0.281    | 1.166        | -0.454     | 0.251    | 0.685        | 0.1500 |
| 0.2000                     | -0.489     | 0.220    | 0.710        | -0.471     | 0.221    | 0.692        | -0.453     | 0.234    | 0.687        | -1.097     |          |              | -1.734     | 0.226    | 1.960        | -0.834     | 0.244    | 1.078        | -0.466     | 0.231    | 0.685        | 0.2000 |
| 0.3000                     | -0.463     | 0.179    | 0.641        | -0.435     | 0.184    | 0.619        | -0.389     | 0.179    | 0.568        |            |          |              | -0.819     | 0.188    | 1.007        | -0.651     | 0.194    | 0.846        | -0.499     | 0.168    | 0.668        | 0.3000 |
| 0.4000                     | -0.434     | 0.161    | 0.595        | -0.386     | 0.157    | 0.543        | -0.323     | 0.149    | 0.472        |            |          |              | -0.283     | 0.157    | 0.440        | -0.525     | 0.156    | 0.681        | -0.505     | 0.126    | 0.631        | 0.4000 |
| 0.5000                     | -0.378     | 0.122    | 0.500        | -0.307     | 0.128    | 0.434        | -0.244     | 0.123    | 0.367        |            |          |              | -0.124     | 0.123    | 0.247        | -0.646     | 0.118    | 0.764        | -0.504     | 0.091    | 0.594        | 0.5000 |
| 0.6000                     | -0.291     | 0.103    | 0.393        | -0.241     | 0.090    | 0.330        | -0.164     | 0.093    | 0.257        |            |          |              | -0.014     | 0.090    | 0.077        | -0.547     | 0.076    | 0.624        | -0.492     | 0.045    | 0.537        | 0.6000 |
| 0.7000                     | -0.208     | 0.085    | 0.293        | -0.183     | 0.064    | 0.247        | -0.147     | 0.062    | 0.209        |            |          |              | -0.123     | 0.053    | 0.176        | -0.355     | 0.035    | 0.590        | -0.486     | -0.008   | 0.477        | 0.7000 |
| 0.8000                     | -0.230     | 0.025    | 0.256        | -0.209     | 0.032    | 0.241        | -0.260     | 0.020    | 0.280        |            |          |              | -0.343     | 0.014    | 0.357        | -0.521     | -0.017   | 0.504        | -0.479     | -0.060   | 0.419        | 0.8000 |
| 0.9000                     | -0.240     | -0.008   | 0.232        | -0.236     | -0.007   | 0.229        | -0.280     | -0.018   | 0.261        |            |          |              | -0.310     | -0.029   | 0.281        | -0.497     | -0.086   | 0.411        | -0.488     | -0.150   | 0.338        | 0.9000 |
| 1.0000                     | -0.237     | -0.015   | 0.222        | -0.264     | -0.053   | 0.210        | -0.206     | -0.054   | 0.152        |            |          |              | -0.026     | -0.077   | -0.051       | -0.483     | -0.172   | 0.312        | -0.512     | -0.278   | 0.234        | 1.0000 |
| M = 0.700 $\alpha = 15.87$ |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |        |
| 0.0000                     | -0.956     | 0.246    | 1.202        | -1.562     | 0.160    | 1.722        | -1.623     | -0.018   | 1.605        | -1.431     | -0.093   | 1.338        | -0.893     | -0.120   | 0.773        | -0.493     | 0.112    |              |            |          |              | 0.0000 |
| 0.0125                     | -1.848     | 0.361    | 2.208        | -1.662     | 0.265    | 1.928        | -1.602     | 0.200    | 1.802        | -1.521     | 0.108    | 1.628        | -1.438     | 0.146    | 1.584        | -0.871     | 0.105    | 0.977        | -0.498     |          |              | 0.0125 |
| 0.0250                     | -2.122     | 0.430    | 2.551        | -1.724     | 0.337    | 2.061        | -1.600     | 0.338    | 1.938        | -1.514     | 0.270    | 1.784        | -1.444     | 0.302    | 1.746        | -0.850     | 0.257    | 1.108        | -0.503     |          |              | 0.0250 |
| 0.0420                     |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              | 0.0420 |
| 0.0500                     | -0.815     | 0.431    | 1.247        | -1.732     | 0.379    | 2.110        | -1.654     | 0.377    | 2.031        |            | 0.360    |              | -1.453     | 0.365    | 1.818        | -0.813     | 0.339    | 1.152        | -0.509     | 0.232    |              | 0.0500 |
| 0.0640                     |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              | 0.0640 |
| 0.0750                     | -0.692     | 0.399    | 1.091        | -1.870     | 0.381    | 2.251        | -1.680     | 0.379    | 2.059        | -1.697     | 0.364    | 2.061        | -1.555     | 0.380    | 1.935        | -0.790     | 0.362    | 1.152        | -0.526     | 0.262    |              | 0.0750 |
| 0.0810                     |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              |            |          |              | 0.0810 |
| 0.1000                     | -0.683     | 0.379    | 1.062        | -1.599     | 0.367    | 1.966        | -1.894     | 0.371    | 2.265        | -1.679     | 0.361    | 2.039        | -1.605     | 0.372    | 1.977        | -0.754     | 0.358    | 1.112        | -0.542     | 0.274    | 0.816        | 0.1000 |
| 0.1500                     | -0.687     | 0.354    | 1.041        | -0.794     | 0.345    | 1.139        | -1.803     | 0.342    | 2.145        | -1.748     | 0.338    | 2.087        | -1.517     | 0.350    | 1.867        | -0.692     | 0.340    | 1.032        | -0.561     | 0.266    | 0.827        | 0.1500 |
| 0.2000                     | -0.630     | 0.329    | 0.959        | -0.635     | 0.333    | 0.967        | -1.111     | 0.338    | 1.449        | -1.910     |          |              | -1.490     | 0.327    | 1.817        | -0.661     | 0.318    | 0.979        | -0.582     | 0.255    | 0.836        | 0.2000 |
| 0.3000                     | -0.599     | 0.278    | 0.877        | -0.544     | 0.280    | 0.825        | -0.599     | 0.281    | 0.880        |            |          |              | -1.635     | 0.283    | 1.918        | -0.615     | 0.267    | 0.882        | -0.610     | 0.214    | 0.824        | 0.3000 |
| 0.4000                     | -0.530     | 0.242    | 0.772        | -0.474     | 0.253    | 0.727        | -0.410     | 0.241    | 0.652        |            |          |              | -0.883     | 0.247    | 1.130        | -0.570     | 0.216    | 0.786        | -0.633     | 0.170    | 0.803        | 0.4000 |
| 0.5000                     | -0.404     | 0.209    | 0.613        | -0.325     | 0.207    | 0.532        | -0.246     | 0.206    | 0.453        |            |          |              | -0.335     | 0.205    | 0.539        | -0.624     | 0.181    | 0.805        | -0.640     | 0.133    | 0.773        | 0.5000 |
| 0.6000                     | -0.308     | 0.182    | 0.490        | -0.269     | 0.185    | 0.454        | -0.238     | 0.168    | 0.406        |            |          |              | -0.444     | 0.161    | 0.605        | -0.645     | 0.132    | 0.777        | -0.647     | 0.071    | 0.718        | 0.6000 |
| 0.7000                     | -0.318     | 0.147    | 0.465        | -0.308     | 0.131    | 0.440        | -0.383     | 0.126    | 0.509        |            |          |              | -0.427     | 0.110    | 0.537        | -0.669     | 0.078    | 0.747        | -0.662     | 0.019    | 0.681        | 0.7000 |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |        |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |        |
| M = 1.304      α = -03.90 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        |
| 0.0000                    | 0.237           | -0.018          | -0.254          | 0.188           | -0.122          | -0.309          | 0.230           | -0.259          | -0.488          |                 |                 |                 | 0.316           | -0.353          | -0.669          | 0.269           | -0.523          | -0.792          | 0.368           | -0.604          |                 | 0.0000 |        |
| 0.0125                    | 0.171           | -0.011          | -0.182          | 0.165           | -0.107          | -0.272          | 0.187           | -0.216          | -0.403          | 0.210           | -0.294          | -0.505          | 0.236           | -0.332          | -0.567          | 0.248           | -0.478          | -0.726          | 0.284           | -0.554          |                 | 0.0125 |        |
| 0.0250                    | 0.125           | -0.009          | -0.134          | 0.138           | -0.098          | -0.236          | 0.153           | -0.184          | -0.338          | 0.169           | -0.265          | -0.434          | 0.178           | -0.317          | -0.495          | 0.226           | -0.450          | -0.676          | 0.225           | -0.554          |                 | 0.0250 |        |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |        |
| 0.0500                    | 0.089           | -0.022          | -0.111          | 0.071           | -0.101          | -0.172          | 0.112           | -0.151          | -0.263          |                 | -0.244          |                 | 0.128           | -0.311          | -0.439          | 0.176           | -0.450          | -0.626          | 0.184           | -0.554          |                 | 0.0500 |        |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |        |
| 0.0750                    | 0.086           | -0.057          | -0.142          | 0.079           | -0.096          | -0.175          | 0.089           | -0.129          | -0.218          | 0.086           | -0.151          | -0.236          | 0.100           | -0.218          | -0.318          | 0.132           | -0.464          | -0.596          | 0.152           | -0.546          |                 | 0.0750 |        |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |        |
| 0.1000                    | 0.047           | -0.067          | -0.114          | 0.073           | -0.097          | -0.170          | 0.083           | -0.119          | -0.202          | 0.071           | -0.132          | -0.204          | 0.091           | -0.150          | -0.241          | 0.100           | -0.452          | -0.553          | 0.133           | -0.553          | -0.687          | 0.1000 |        |
| 0.1500                    | 0.056           | -0.070          | -0.126          | 0.055           | -0.097          | -0.152          | 0.054           | -0.120          | -0.173          | 0.068           | -0.132          | -0.200          | 0.075           | -0.151          | -0.226          | 0.090           | -0.354          | -0.444          | 0.112           | -0.563          | -0.676          | 0.1500 |        |
| 0.2000                    | 0.040           | -0.090          | -0.131          | 0.062           | -0.091          | -0.144          | 0.046           | -0.112          | -0.158          | 0.064           | -0.132          | -0.200          | 0.045           | -0.143          | -0.187          | 0.073           | -0.240          | -0.313          | 0.090           | -0.557          | -0.647          | 0.2000 |        |
| 0.3000                    | 0.026           | -0.091          | -0.117          | 0.047           | -0.097          | -0.152          | 0.046           | -0.112          | -0.158          |                 |                 |                 | 0.064           | -0.140          | -0.204          | 0.057           | -0.202          | -0.259          | 0.083           | -0.504          | -0.587          | 0.3000 |        |
| 0.4000                    | 0.033           | -0.103          | -0.136          | 0.038           | -0.102          | -0.140          | 0.041           | -0.114          | -0.155          |                 |                 |                 | 0.045           | -0.123          | -0.168          | 0.040           | -0.188          | -0.228          | 0.079           | -0.379          | -0.458          | 0.4000 |        |
| 0.5000                    | 0.040           | -0.114          | -0.154          | 0.045           | -0.117          | -0.162          | 0.041           | -0.117          | -0.158          |                 |                 |                 | 0.032           | -0.141          | -0.174          | 0.090           | -0.182          | -0.272          | 0.088           | -0.278          | -0.366          | 0.5000 |        |
| 0.6000                    | 0.040           | -0.117          | -0.157          | 0.060           | -0.124          | -0.153          | 0.022           | -0.129          | -0.151          |                 |                 |                 | 0.025           | -0.134          | -0.160          | 0.118           | -0.170          | -0.288          | 0.085           | -0.244          | -0.329          | 0.6000 |        |
| 0.7000                    | 0.014           | -0.114          | -0.128          | 0.002           | -0.125          | -0.127          | 0.007           | -0.128          | -0.135          |                 |                 |                 | 0.039           | -0.141          | -0.180          | 0.099           | -0.173          | -0.272          | 0.078           | -0.226          | -0.305          | 0.7000 |        |
| 0.8000                    | -0.004          | -0.140          | -0.137          | 0.021           | -0.135          | -0.156          | 0.013           | -0.134          | -0.147          |                 |                 |                 | -0.035          | -0.140          | -0.195          | 0.066           | -0.167          | -0.233          | 0.077           | -0.208          | -0.284          | 0.8000 |        |
| 0.9000                    | -0.018          | -0.130          | -0.112          | -0.023          | -0.129          | -0.106          | -0.047          | -0.136          | -0.089          |                 |                 |                 | -0.087          | -0.134          | -0.047          | 0.065           | -0.161          | -0.226          | 0.062           | -0.192          | -0.254          | 0.9000 |        |
| 1.0000                    | -0.031          | -0.084          | -0.053          | -0.129          | -0.105          | 0.024           | -0.172          | -0.133          | 0.038           |                 |                 |                 | -0.116          | -0.124          | -0.008          | 0.097           | -0.156          | -0.252          | 0.035           | -0.178          | -0.213          | 1.0000 |        |
| M = 1.301      α = 00.15  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        |
| 0.0000                    | 0.170           | 0.054           | -0.115          | 0.105           | 0.026           | -0.078          | 0.113           | 0.013           | -0.099          |                 |                 |                 | 0.068           | 0.059           | -0.008          | 0.030           | 0.053           | 0.023           | -0.058          | -0.034          |                 | 0.0000 |        |
| 0.0125                    | 0.122           | 0.050           | -0.072          | 0.071           | 0.014           | -0.056          | 0.044           | 0.001           | -0.045          | 0.006           | 0.018           | 0.012           | 0.011           | 0.021           | -0.010          | -0.012          | 0.008           | 0.020           | -0.067          |                 |                 | 0.0125 |        |
| 0.0250                    | 0.083           | 0.045           | -0.038          | 0.042           | 0.004           | -0.038          | 0.001           | -0.012          | -0.012          | -0.008          | -0.004          | 0.004           | -0.025          | -0.006          | 0.019           | -0.042          | -0.026          | 0.016           | -0.077          |                 |                 | 0.0250 |        |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |        |
| 0.0500                    | 0.030           | 0.033           | 0.003           | -0.001          | -0.014          | -0.014          | -0.015          | -0.026          | -0.010          |                 | -0.029          |                 | -0.035          | -0.028          | 0.008           | -0.066          | -0.061          | 0.004           | -0.103          | -0.071          |                 | 0.0500 |        |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |        |
| 0.0750                    | 0.042           | 0.012           | -0.030          | -0.019          | -0.023          | -0.004          | -0.018          | -0.031          | -0.013          | -0.040          | -0.035          | 0.006           | -0.052          | -0.032          | 0.021           | -0.076          | -0.071          | 0.005           | -0.118          | -0.081          |                 | 0.0750 |        |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |        |
| 0.1000                    | -0.024          | -0.003          | 0.020           | -0.008          | -0.032          | -0.024          | -0.040          | -0.032          | 0.008           | -0.046          | -0.035          | 0.012           | -0.066          | -0.040          | 0.026           | -0.086          | -0.074          | 0.012           | -0.122          | -0.084          | 0.037           | 0.1000 |        |
| 0.1500                    | -0.006          | -0.016          | -0.009          | -0.025          | -0.022          | 0.003           | -0.048          | -0.033          | 0.014           | -0.055          | -0.032          | 0.023           | -0.050          | -0.050          | 0.011           | -0.100          | -0.079          | 0.021           | -0.122          | -0.086          | 0.036           | 0.1500 |        |
| 0.2000                    | -0.028          | -0.011          | 0.017           | -0.035          | -0.019          | 0.016           | -0.041          | 0.009           | 0.050           | -0.051          |                 |                 | -0.054          | -0.048          | 0.006           | -0.095          | -0.070          | 0.025           | -0.116          | -0.096          | 0.020           | 0.2000 |        |
| 0.3000                    | -0.043          | -0.019          | 0.024           | -0.057          | -0.023          | 0.034           | -0.057          | -0.041          | 0.017           |                 |                 |                 | -0.059          | -0.055          | 0.004           | -0.091          | -0.077          | 0.014           | -0.106          | -0.110          | -0.003          | 0.3000 |        |
| 0.4000                    | -0.044          | -0.033          | 0.011           | -0.043          | -0.036          | 0.006           | -0.049          | -0.050          | -0.001          |                 |                 |                 | -0.060          | -0.052          | 0.008           | -0.074          | -0.090          | -0.016          | -0.102          | -0.113          | -0.011          | 0.4000 |        |
| 0.5000                    | -0.044          | -0.047          | -0.003          | -0.043          | -0.052          | -0.009          | -0.045          | -0.057          | -0.012          |                 |                 |                 | -0.068          | -0.072          | -0.005          | -0.047          | -0.087          | -0.040          | -0.089          | -0.115          | -0.026          | 0.5000 |        |
| 0.6000                    | -0.034          | -0.053          | -0.019          | -0.048          | -0.062          | -0.014          | -0.054          | -0.068          | -0.014          |                 |                 |                 | -0.058          | -0.069          | -0.011          | 0.025           | -0.090          | -0.115          | -0.079          | -0.112          | -0.033          | 0.6000 |        |
| 0.7000                    | -0.055          | -0.057          | -0.002          | -0.068          | -0.071          | -0.002          | -0.062          | -0.068          | -0.014          |                 |                 |                 | -0.069          | -0.080          | -0.011          | 0.047           | -0.092          | -0.139          | -0.070          | -0.108          | -0.037          | 0.7000 |        |
| 0.8000                    | -0.084          | -0.080          | 0.004           | -0.062          | -0.080          | -0.018          | -0.070          | -0.076          | -0.006          |                 |                 |                 | -0.137          | -0.081          | 0.056           | 0.006           | -0.083          | -0.089          | -0.051          | -0.103          | -0.053          | 0.8000 |        |
| 0.9000                    | -0.100          | -0.079          | 0.020           | -0.112          | -0.079          | 0.033           | -0.141          | -0.085          | 0.056           |                 |                 |                 | -0.186          | -0.077          | 0.109           | 0.010           | -0.084          | -0.094          | -0.009          | -0.089          | -0.080          | 0.9000 |        |
| 1.0000                    | -0.102          | -0.055          | 0.047           | -0.218          | -0.068          | 0.150           | -0.274          | -0.097          | 0.177           |                 |                 |                 | -0.217          | -0.069          | 0.148           | 0.060           | -0.094          | -0.154          | 0.055           | -0.064          | -0.120          | 1.0000 |        |
| M = 1.301      α = 04.11  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |        |
| 0.0000                    | -0.201          | 0.269           | 0.470           | -0.253          | 0.232           | 0.470           | -0.178          | 0.246           | 0.424           |                 |                 |                 | -0.357          | 0.296           | 0.654           | -0.536          | 0.036           | 0.572           | -0.621          | 0.203           |                 | 0.0000 |        |
| 0.0125                    | -0.182          | 0.228           | 0.410           | -0.355          | 0.247           | 0.602           | -0.169          | 0.178           | 0.347           | -0.300          | 0.197           | 0.497           | -0.337          | 0.228           | 0.564           | -0.502          | 0.152           | 0.654           | -0.578          |                 |                 | 0.0125 |        |
| 0.0250                    | -0.170          | 0.200           | 0.370           | -0.376          | 0.248           | 0.624           | -0.161          | 0.130           | 0.291           | -0.294          | 0.166           | 0.461           | -0.324          | 0.178           | 0.502           | -0.479          | 0.209           | 0.688           | -0.551          |                 |                 | 0.0250 |        |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |        |
| 0.0500                    | -0.163          | 0.184           | 0.347           | -0.173          | 0.205           | 0.377           | -0.145          | 0.094           | 0.238           |                 | 0.119           |                 | -0.324          | 0.135           | 0.459           | -0.466          | 0.152           | 0.618           | -0.547          | 0.180           |                 | 0.0500 |        |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |        |
| 0.0750                    | -0.141          | 0.161           | 0.303           | -0.191          | 0.175           | 0.366           | -0.126          | 0.077           | 0.204           | -0.167          | 0.094           | 0.261           | -0.192          | 0.112           | 0.305           | -0.469          | 0.116           | 0.585           | -0.540          | 0.163           |                 | 0.0750 |        |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |        |
| 0.1000                    | -0.153          | 0.145           | 0.297           | -0.199          | 0.153           | 0.352           | -0.133          | 0.073           | 0.206           | -0.159          | 0.085           | 0.244           | -0.174          | 0.092           | 0.266           | -0.466          | 0.103           | 0.570           | -0.546          | 0.146           |                 | 0.1000 |        |
| 0.1500                    | -0.166          | 0.136           | 0.302           | -0.191          | 0.147           | 0.337           | -0.124          | 0.061           | 0.185           | -0.152          | 0.081           | 0.232           | -0.173          | 0.061           | 0.234           | -0.413          | 0.079           | 0.493           | -0.558          | 0.106           | 0.674           | 0.1500 |        |
| 0.2000                    | -0.190          | 0.127           | 0.317           | -0.189          | 0.145           | 0.334           | -0.112          | 0.091           | 0.203           | -0.135          |                 |                 | -0.154          | 0.060           | 0.213           | -0.263          | 0.074           | 0.337           | -0.558          | 0.081           | 0.639           | 0.2000 |        |
| 0.3000                    | -0.190          | 0.124           | 0.314           | -0.192          | 0.130           | 0.322           | -0.126          | 0.040           | 0.166           |                 |                 |                 | -0.140          | 0.038           | 0.179           | -0.202          | 0.040           | 0.242           | -0.516          | 0.057           | 0.733           | 0.3000 |        |
| 0.4000                    | -0.193          | 0.119           | 0.312           | -0.185          | 0.119           | 0.305           | -0.121          | 0.027           | 0.149           |                 |                 |                 | -0.137          | 0.043           | 0.180           | -0.193          | 0.022           | 0.215           | -0.459          | 0.039           | 0.499           | 0.4000 |        |
| 0.5000                    | -0.187          | 0.098           | 0.285           | -0.179          | 0.101           | 0.280           | -0.123          | 0.013           | 0.017           | 0.130           |                 |                 | -0.137          | 0.003           | 0.141           | -0.132          | 0.015           | 0.147           | -0.345          | 0.032           | 0.378           | 0.5000 |        |
| 0.6000                    | -0.172          | 0.087           | 0.259           | -0.178          | 0.083           | 0.251           | -0.123          | 0.002           | 0.125           |                 |                 |                 | -0.133          | 0.005           | 0.138           | -0.055          | -0.003          | 0.053           | -0.244          | 0.019           | 0.263           | 0.6000 |        |
| 0.7000                    | -0.175          | 0.085           | 0.260           | -0.193          | 0.079           | 0.272           | -0.133          | 0.005           | 0.028           |                 |                 |                 | -0.131          | 0.005           | 0.126           | -0.040          | 0.048           | 0.152           | -0.050          | -0.186          | 0.015           | 0.201  | 0.7000 |
| 0.8000                    | -0.199          | 0.070           | 0.269           | -0.183          | 0.070           | 0.253           | -0.136          | 0.010           | 0.126           |                 |                 |                 | -0.211          | -0.010          | 0.201           | -0.050          | -0.002          | 0.048           | -0.152          | 0.022           |                 |        |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.304      α = 08.01 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.190          | 0.288           | 0.478           | -0.260          | 0.280           | 0.541           | -0.449          | 0.337           | 0.786           |                 |                 |                 | -0.509          | 0.368           | 0.877           | -0.517          | 0.347           | 0.864           | -0.514          | 0.307           |                 | 0.0000 |
| 0.0125                   | -0.181          | 0.226           | 0.407           | -0.355          | 0.250           | 0.605           | -0.457          | 0.281           | 0.738           | -0.491          | 0.313           | 0.804           | -0.503          | 0.326           | 0.829           | -0.508          | 0.340           | 0.848           | -0.519          |                 |                 | 0.0125 |
| 0.0250                   | -0.172          | 0.190           | 0.362           | -0.376          | 0.224           | 0.600           | -0.465          | 0.241           | 0.706           | -0.502          | 0.275           | 0.777           | -0.500          | 0.291           | 0.791           | -0.504          | 0.328           | 0.831           | -0.521          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.154          | 0.194           | 0.348           | -0.196          | 0.189           | 0.385           | -0.480          | 0.209           | 0.688           |                 | 0.229           |                 | -0.497          | 0.246           | 0.743           | -0.506          | 0.287           | 0.792           | -0.521          | 0.306           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.141          | 0.157           | 0.298           | -0.200          | 0.163           | 0.363           | -0.372          | 0.190           | 0.562           | -0.475          | 0.211           | 0.685           | -0.510          | 0.220           | 0.730           | -0.507          | 0.255           | 0.762           | -0.522          | 0.294           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.157          | 0.140           | 0.297           | -0.199          | 0.148           | 0.346           | -0.250          | 0.177           | 0.427           | -0.439          | 0.192           | 0.631           | -0.507          | 0.197           | 0.704           | -0.509          | 0.234           | 0.744           | -0.527          | 0.267           | 0.794           | 0.1000 |
| 0.1500                   | -0.171          | 0.128           | 0.299           | -0.192          | 0.145           | 0.337           | -0.191          | 0.153           | 0.344           | -0.377          | 0.165           | 0.542           | -0.467          | 0.173           | 0.640           | -0.520          | 0.198           | 0.718           | -0.529          | 0.247           | 0.776           | 0.1500 |
| 0.2000                   | -0.185          | 0.128           | 0.313           | -0.190          | 0.144           | 0.334           | -0.185          | 0.172           | 0.356           | -0.271          |                 |                 | -0.450          | 0.161           | 0.612           | -0.514          | 0.183           | 0.697           | -0.533          | 0.223           | 0.756           | 0.2000 |
| 0.3000                   | -0.190          | 0.127           | 0.316           | -0.192          | 0.131           | 0.323           | -0.193          | 0.124           | 0.318           |                 |                 |                 | -0.319          | 0.141           | 0.460           | -0.510          | 0.166           | 0.655           | -0.519          | 0.192           | 0.711           | 0.3000 |
| 0.4000                   | -0.192          | 0.118           | 0.310           | -0.193          | 0.115           | 0.308           | -0.183          | 0.113           | 0.296           |                 |                 |                 | -0.150          | 0.118           | 0.268           | -0.492          | 0.133           | 0.625           | -0.518          | 0.174           | 0.691           | 0.4000 |
| 0.5000                   | -0.180          | 0.092           | 0.272           | -0.180          | 0.094           | 0.274           | -0.179          | 0.093           | 0.272           |                 |                 |                 | -0.172          | 0.098           | 0.270           | -0.518          | 0.120           | 0.637           | -0.514          | 0.164           | 0.679           | 0.5000 |
| 0.6000                   | -0.176          | 0.082           | 0.258           | -0.181          | 0.085           | 0.266           | -0.187          | 0.083           | 0.270           |                 |                 |                 | -0.181          | 0.088           | 0.269           | -0.484          | 0.113           | 0.597           | -0.515          | 0.150           | 0.665           | 0.6000 |
| 0.7000                   | -0.183          | 0.085           | 0.267           | -0.194          | 0.078           | 0.272           | -0.192          | 0.086           | 0.278           |                 |                 |                 | -0.083          | 0.086           | 0.169           | -0.474          | 0.111           | 0.584           | -0.514          | 0.137           | 0.650           | 0.7000 |
| 0.8000                   | -0.210          | 0.070           | 0.281           | -0.180          | 0.074           | 0.254           | -0.148          | 0.074           | 0.222           |                 |                 |                 | -0.240          | 0.095           | 0.335           | -0.415          | 0.110           | 0.525           | -0.511          | 0.121           | 0.632           | 0.8000 |
| 0.9000                   | -0.075          | 0.252           | -0.196          | 0.081           | 0.276           | -0.236          | 0.080           | 0.316           |                 |                 |                 |                 | -0.298          | 0.082           | 0.381           | -0.124          | 0.075           | 0.199           | -0.484          | 0.119           | 0.603           | 0.9000 |
| 1.0000                   | -0.083          | 0.098           | 0.182           | -0.242          | 0.096           | 0.339           | -0.455          | 0.104           | 0.559           |                 |                 |                 | -0.259          | 0.047           | 0.306           | -0.401          | 0.007           | -0.394          | -0.433          | 0.132           | 0.565           | 1.0000 |
| M = 1.302      α = 12.16 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.407          | 0.370           | 0.777           | -0.558          | 0.340           | 0.898           | -0.567          | 0.380           | 0.947           |                 |                 |                 | -0.575          | 0.379           | 0.955           | -0.557          | 0.380           | 0.937           | -0.556          | 0.364           |                 | 0.0000 |
| 0.0125                   | -0.490          | 0.364           | 0.854           | -0.560          | 0.346           | 0.906           | -0.569          | 0.370           | 0.939           | -0.593          | 0.367           | 0.960           | -0.568          | 0.390           | 0.958           | -0.550          | 0.382           | 0.933           | -0.552          |                 |                 | 0.0125 |
| 0.0250                   | -0.502          | 0.351           | 0.853           | -0.565          | 0.342           | 0.907           | -0.573          | 0.358           | 0.931           | -0.589          | 0.370           | 0.959           | -0.564          | 0.390           | 0.954           | -0.547          | 0.386           | 0.933           | -0.551          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.313          | 0.306           | 0.618           | -0.586          | 0.305           | 0.891           | -0.584          | 0.327           | 0.912           |                 | 0.344           |                 | -0.563          | 0.360           | 0.923           | -0.551          | 0.393           | 0.944           | -0.553          | 0.390           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.245          | 0.268           | 0.513           | -0.602          | 0.293           | 0.894           | -0.601          | 0.302           | 0.903           | -0.600          | 0.316           | 0.916           | -0.568          | 0.340           | 0.908           | -0.552          | 0.368           | 0.920           | -0.552          | 0.390           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.246          | 0.259           | 0.504           | -0.575          | 0.276           | 0.851           | -0.610          | 0.288           | 0.898           | -0.609          | 0.310           | 0.919           | -0.579          | 0.320           | 0.899           | -0.554          | 0.351           | 0.904           | -0.557          | 0.383           | 0.930           | 0.1000 |
| 0.1500                   | -0.247          | 0.256           | 0.503           | -0.246          | 0.243           | 0.489           | -0.610          | 0.272           | 0.882           | -0.628          | 0.272           | 0.900           | -0.600          | 0.291           | 0.890           | -0.559          | 0.326           | 0.884           | -0.561          | 0.355           | 0.916           | 0.1500 |
| 0.2000                   | -0.252          | 0.231           | 0.483           | -0.232          | 0.245           | 0.477           | -0.524          | 0.275           | 0.800           | -0.629          |                 |                 | -0.618          | 0.277           | 0.894           | -0.560          | 0.301           | 0.861           | -0.576          | 0.336           | 0.912           | 0.2000 |
| 0.3000                   | -0.229          | 0.221           | 0.450           | -0.233          | 0.235           | 0.468           | -0.222          | 0.232           | 0.455           |                 |                 |                 | -0.629          | 0.242           | 0.871           | -0.576          | 0.279           | 0.855           | -0.585          | 0.307           | 0.892           | 0.3000 |
| 0.4000                   | -0.238          | 0.214           | 0.452           | -0.235          | 0.214           | 0.449           | -0.225          | 0.215           | 0.440           |                 |                 |                 | -0.615          | 0.228           | 0.843           | -0.591          | 0.270           | 0.861           | -0.621          | 0.280           | 0.901           | 0.4000 |
| 0.5000                   | -0.236          | 0.197           | 0.433           | -0.230          | 0.195           | 0.426           | -0.226          | 0.200           | 0.426           |                 |                 |                 | -0.418          | 0.215           | 0.633           | -0.636          | 0.254           | 0.890           | -0.634          | 0.262           | 0.895           | 0.5000 |
| 0.6000                   | -0.226          | 0.194           | 0.420           | -0.237          | 0.192           | 0.429           | -0.240          | 0.206           | 0.446           |                 |                 |                 | -0.265          | 0.229           | 0.493           | -0.660          | 0.221           | 0.881           | -0.642          | 0.243           | 0.886           | 0.6000 |
| 0.7000                   | -0.230          | 0.203           | 0.433           | -0.243          | 0.200           | 0.443           | -0.242          | 0.213           | 0.455           |                 |                 |                 | -0.221          | 0.198           | 0.418           | -0.648          | 0.198           | 0.846           | -0.635          | 0.243           | 0.878           | 0.7000 |
| 0.8000                   | -0.249          | 0.160           | 0.409           | -0.248          | 0.162           | 0.410           | -0.197          | 0.161           | 0.358           |                 |                 |                 | -0.243          | 0.163           | 0.407           | -0.657          | 0.179           | 0.836           | -0.564          | 0.226           | 0.790           | 0.8000 |
| 0.9000                   | -0.180          | 0.148           | 0.328           | -0.219          | 0.160           | 0.379           | -0.239          | 0.148           | 0.387           |                 |                 |                 | -0.315          | 0.154           | 0.468           | -0.639          | 0.170           | 0.809           | -0.516          | 0.216           | 0.732           | 0.9000 |
| 1.0000                   | -0.023          | 0.168           | 0.190           | -0.155          | 0.193           | 0.348           | -0.369          | 0.175           | 0.544           |                 |                 |                 | -0.434          | 0.169           | 0.603           | -0.595          | 0.170           | 0.764           | -0.491          | 0.214           | 0.705           | 1.0000 |
| M = 1.302      α = 16.12 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.605          | 0.466           | 1.071           | -0.631          | 0.439           | 1.070           | -0.610          | 0.392           | 1.003           |                 |                 |                 | -0.615          | 0.377           | 0.993           | -0.625          | 0.355           | 0.980           | -0.489          | 0.358           |                 | 0.0000 |
| 0.0125                   | -0.626          | 0.472           | 1.098           | -0.626          | 0.441           | 1.067           | -0.614          | 0.431           | 1.049           | -0.617          | 0.411           | 1.028           | -0.612          | 0.428           | 1.041           | -0.600          | 0.415           | 1.015           | -0.486          |                 |                 | 0.0125 |
| 0.0250                   | -0.639          | 0.472           | 1.110           | -0.626          | 0.442           | 1.068           | -0.618          | 0.451           | 1.068           | -0.617          | 0.457           | 1.074           | -0.611          | 0.459           | 1.069           | -0.585          | 0.456           | 1.041           | -0.484          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                   | -0.641          | 0.451           | 1.092           | -0.642          | 0.436           | 1.079           | -0.622          | 0.437           | 1.059           |                 | 0.454           |                 | -0.613          | 0.456           | 1.069           | -0.588          | 0.480           | 1.069           | -0.478          | 0.429           |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                   | -0.547          | 0.420           | 0.967           | -0.669          | 0.418           | 1.087           | -0.639          | 0.416           | 1.055           | -0.614          | 0.427           | 1.041           | -0.614          | 0.449           | 1.064           | -0.594          | 0.478           | 0.071           | -0.475          | 0.450           |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                   | -0.351          | 0.388           | 0.739           | -0.686          | 0.402           | 1.088           | -0.677          | 0.406           | 1.084           | -0.636          | 0.416           | 1.050           | -0.616          | 0.436           | 1.052           | -0.597          | 0.464           | 1.061           | -0.476          | 0.462           | 0.938           | 0.1000 |
| 0.1500                   | -0.319          | 0.384           | 0.702           | -0.643          | 0.375           | 1.018           | -0.690          | 0.375           | 1.065           | -0.666          | 0.396           | 1.063           | -0.636          | 0.409           | 1.045           | -0.602          | 0.438           | 1.039           | -0.475          | 0.455           | 0.931           | 0.1500 |
| 0.2000                   | -0.308          | 0.354           | 0.662           | -0.532          | 0.366           | 0.898           | -0.691          | 0.391           | 1.082           | -0.689          |                 |                 | -0.659          | 0.392           | 1.051           | -0.602          | 0.418           | 1.020           | -0.481          | 0.447           | 0.927           | 0.2000 |
| 0.3000                   | -0.304          | 0.337           | 0.641           | -0.336          | 0.350           | 0.685           | -0.583          | 0.348           | 0.931           |                 |                 |                 | -0.687          | 0.390           | 1.077           | -0.613          | 0.391           | 1.004           | -0.493          | 0.425           | 0.918           | 0.3000 |
| 0.4000                   | -0.295          | 0.336           | 0.631           | -0.323          | 0.341           | 0.654           | -0.419          | 0.359           | 0.778           |                 |                 |                 | -0.704          | 0.348           | 1.052           | -0.587          | 0.354           | 0.940           | -0.521          | 0.404           | 0.925           | 0.4000 |
| 0.5000                   | -0.288          | 0.332           | 0.620           | -0.301          | 0.322           | 0.623           | -0.342          | 0.316           | 0.658           |                 |                 |                 | -0.678          | 0.313           | 0.991           | -0.578          | 0.350           | 0.928           | -0.535          | 0.387           | 0.922           | 0.5000 |
| 0.6000                   | -0.284          | 0.305           | 0.590           | -0.295          | 0.291           | 0.586           | -0.315          | 0.292           | 0.606           |                 |                 |                 | -0.625          | 0.300           | 0.925           | -0.577          | 0.337           | 0.914           | -0.543          | 0.365           | 0.908           | 0.6000 |
| 0.7000                   | -0.274          | 0.296           | 0.570           | -0.297          | 0.282           | 0.579           | -0.306          | 0.284           | 0.590           |                 |                 |                 | -0.552          | 0.295           | 0.847           | -0.584          | 0.324           | 0.908           | -0.547          | 0.356           | 0.903           | 0.7000 |
| 0.8000                   | -0.305          | 0.280           | 0.584           | -0.310          | 0.276           | 0.586           | -0.313          | 0.280           | 0.593           |                 |                 |                 | -0.552          | 0.288           | 0.539           | -0.583          | 0.307           | 0.890           | -0.553          | 0.343           | 0.896           | 0.8000 |
|                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Continued

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| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 2.229      α = -03.65 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.278           | 0.017           | -0.261          | 0.218           | 0.001           | -0.216          | 0.231           | -0.016          | -0.247          | 0.213           | -0.028          | -0.241          | 0.292           | 0.002           | -0.290          | 0.298           | 0.014           | -0.284          | 0.248           | 0.102           |                 | 0.0000 |
| 0.0125                    | 0.185           | 0.017           | -0.168          | 0.173           | -0.007          | -0.180          | 0.193           | -0.028          | -0.222          | 0.173           | -0.044          | -0.217          | 0.232           | -0.023          | -0.254          | 0.250           | -0.002          | -0.251          | 0.250           |                 |                 | 0.0125 |
| 0.0250                    | 0.123           | 0.014           | -0.109          | 0.140           | -0.012          | -0.153          | 0.161           | -0.037          | -0.198          | 0.173           | -0.044          | -0.217          | 0.186           | -0.033          | -0.219          | 0.213           | -0.014          | -0.227          | 0.240           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.093           | 0.001           | -0.091          | 0.109           | -0.017          | -0.126          | 0.116           | -0.040          | -0.157          |                 |                 | -0.057          | 0.142           | -0.009          | -0.151          | 0.176           | -0.032          | -0.208          | 0.181           |                 | -0.014          | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.089           | -0.003          | -0.092          | 0.092           | -0.017          | -0.109          | 0.098           | -0.042          | -0.140          | 0.160           | -0.056          | -0.186          | 0.117           | -0.047          | -0.164          | 0.146           | -0.042          | -0.188          | 0.154           |                 | -0.042          | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.081           | -0.006          | -0.087          | 0.085           | -0.023          | -0.107          | 0.083           | -0.039          | -0.122          | 0.101           | -0.057          | -0.158          | 0.094           | -0.058          | -0.152          | 0.121           | -0.054          | -0.175          | 0.137           | -0.052          | -0.190          | 0.1000 |
| 0.1500                    | 0.069           | -0.009          | -0.078          | 0.065           | -0.033          | -0.098          | 0.066           | -0.037          | -0.102          | 0.073           | -0.050          | -0.123          | 0.074           | -0.054          | -0.127          | 0.109           | -0.059          | -0.168          | 0.119           | -0.054          | -0.173          | 0.1500 |
| 0.2000                    | 0.060           | -0.018          | -0.078          | 0.061           | -0.034          | -0.095          | 0.062           | -0.037          | -0.102          | 0.066           |                 |                 | 0.062           | -0.050          | -0.113          | 0.088           | -0.071          | -0.159          | 0.101           | -0.060          | -0.160          | 0.2000 |
| 0.3000                    | 0.054           | -0.034          | -0.088          | 0.049           | -0.019          | -0.068          | 0.041           | -0.048          | -0.090          |                 |                 |                 | 0.050           | -0.052          | -0.092          | 0.061           | -0.082          | -0.143          | 0.066           | -0.067          | -0.133          | 0.3000 |
| 0.4000                    | 0.029           | -0.038          | -0.067          | 0.034           | -0.044          | -0.078          | 0.030           | -0.050          | -0.080          |                 |                 |                 | 0.040           | -0.052          | -0.092          | 0.061           | -0.082          | -0.143          | 0.066           | -0.067          | -0.133          | 0.4000 |
| 0.5000                    | 0.025           | -0.047          | -0.072          | 0.026           | -0.046          | -0.072          | 0.026           | -0.053          | -0.078          |                 |                 |                 | 0.029           | -0.054          | -0.083          | 0.049           | -0.088          | -0.137          | 0.060           | -0.074          | -0.133          | 0.5000 |
| 0.6000                    | 0.050           | -0.052          | -0.102          | 0.021           | -0.056          | -0.078          | 0.017           | -0.062          | -0.079          |                 |                 |                 | 0.02            | -0.062          | -0.085          | 0.060           | -0.092          | -0.152          | 0.049           | -0.086          | -0.135          | 0.6000 |
| 0.7000                    | 0.041           | -0.052          | -0.093          | 0.014           | -0.055          | -0.069          | 0.014           | -0.059          | -0.073          |                 |                 |                 | 0.034           | -0.062          | -0.096          | 0.074           | -0.088          | -0.162          | 0.044           | -0.088          | -0.132          | 0.7000 |
| 0.8000                    | 0.010           | -0.065          | -0.075          | 0.009           | -0.060          | -0.068          | 0.010           | -0.060          | -0.071          |                 |                 |                 | 0.010           | -0.059          | -0.069          | 0.077           | -0.089          | -0.167          | 0.042           | -0.089          | -0.130          | 0.8000 |
| 0.9000                    | 0.014           | -0.061          | -0.075          | 0.009           | -0.058          | -0.066          | 0.006           | -0.060          | -0.067          |                 |                 |                 | -0.015          | -0.054          | -0.039          | 0.059           | -0.084          | -0.143          | 0.037           | -0.090          | -0.127          | 0.9000 |
| 1.0000                    | 0.052           | -0.040          | -0.093          | 0.014           | -0.049          | -0.063          | 0.002           | -0.059          | -0.061          |                 |                 |                 | -0.041          | -0.047          | -0.006          | 0.019           | -0.071          | -0.090          | 0.029           | -0.092          | -0.121          | 1.0000 |
| M = 2.233      α = 00.35  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.219           | 0.066           | -0.153          | 0.152           | 0.106           | -0.045          | 0.149           | 0.113           | -0.036          |                 |                 |                 | 0.138           | 0.168           | 0.030           | 0.132           | 0.158           | 0.026           | 0.127           | -0.020          |                 | 0.0000 |
| 0.0125                    | 0.136           | 0.068           | -0.073          | 0.114           | 0.078           | -0.036          | 0.115           | 0.080           | -0.036          | 0.080           | 0.116           | 0.036           | 0.099           | 0.127           | 0.028           | 0.101           | 0.127           | 0.025           | 0.096           |                 |                 | 0.0125 |
| 0.0250                    | 0.081           | 0.054           | -0.022          | 0.084           | 0.056           | -0.029          | 0.086           | 0.056           | -0.030          | 0.060           | 0.081           | 0.022           | 0.069           | 0.094           | 0.025           | 0.080           | 0.101           | 0.021           | 0.074           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.049           | 0.038           | -0.011          | 0.048           | 0.027           | -0.020          | 0.043           | 0.030           | -0.013          |                 |                 |                 | 0.055           |                 | 0.040           | 0.051           | 0.011           | 0.066           | 0.066           | -0.001          | 0.057           | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.041           | 0.024           | -0.017          | 0.031           | 0.020           | -0.011          | 0.025           | 0.019           | -0.006          | 0.038           | 0.029           | -0.009          | 0.021           | 0.028           | 0.007           | 0.037           | 0.044           | 0.007           | 0.045           |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.033           | 0.022           | -0.011          | 0.024           | 0.015           | -0.009          | 0.010           | 0.012           | 0.002           | 0.010           | 0.018           | 0.008           | 0.006           | 0.019           | 0.013           | 0.019           | 0.035           | 0.015           | 0.025           | 0.056           | 0.025           | 0.1000 |
| 0.1500                    | 0.022           | 0.019           | -0.004          | 0.006           | 0.008           | 0.002           | 0.002           | 0.003           | 0.003           | 0.006           | -0.005          | 0.009           | -0.007          | 0.005           | 0.012           | 0.004           | 0.012           | 0.017           | 0.017           | 0.038           | 0.021           | 0.1500 |
| 0.2000                    | 0.011           | 0.013           | 0.002           | 0.002           | 0.007           | 0.005           | 0.007           | 0.010           | 0.014           | -0.017          |                 |                 | -0.014          | -0.003          | 0.011           | -0.007          | 0.008           | 0.015           | -0.004          | 0.026           | 0.031           | 0.2000 |
| 0.3000                    | 0.004           | -0.003          | -0.007          | -0.008          | 0.020           | -0.015          | -0.005          | 0.005           | 0.010           |                 |                 |                 | -0.020          | -0.005          | 0.015           | -0.029          | -0.018          | 0.010           | -0.008          | 0.013           | 0.021           | 0.3000 |
| 0.4000                    | -0.022          | -0.003          | 0.019           | -0.021          | -0.010          | 0.011           | -0.025          | -0.018          | 0.006           |                 |                 |                 | -0.022          | -0.008          | 0.014           | -0.028          | -0.023          | 0.005           | -0.024          | -0.003          | 0.021           | 0.4000 |
| 0.5000                    | -0.026          | -0.015          | 0.010           | -0.026          | -0.018          | 0.008           | -0.028          | -0.020          | 0.008           |                 |                 |                 | -0.028          | -0.020          | 0.007           | -0.033          | -0.026          | 0.007           | -0.027          | -0.012          | 0.014           | 0.5000 |
| 0.6000                    | 0.011           | -0.021          | -0.032          | -0.029          | -0.025          | 0.005           | -0.032          | -0.029          | 0.003           |                 |                 |                 | -0.033          | -0.025          | 0.008           | -0.030          | -0.029          | 0.002           | -0.037          | -0.021          | 0.016           | 0.6000 |
| 0.7000                    | 0.002           | -0.023          | -0.025          | -0.033          | -0.028          | 0.005           | -0.032          | -0.029          | 0.006           |                 |                 |                 | -0.023          | -0.026          | -0.003          | 0.014           | -0.029          | -0.043          | -0.042          | -0.027          | 0.016           | 0.7000 |
| 0.8000                    | -0.031          | -0.040          | -0.009          | -0.036          | -0.035          | 0.001           | -0.035          | -0.031          | 0.004           |                 |                 |                 | -0.048          | -0.028          | 0.020           | 0.019           | -0.035          | -0.053          | -0.045          | -0.033          | 0.013           | 0.8000 |
| 0.9000                    | -0.029          | -0.036          | -0.007          | -0.033          | -0.038          | -0.005          | -0.039          | -0.038          | 0.001           |                 |                 |                 | -0.070          | -0.033          | 0.037           | 0.015           | -0.061          | -0.053          | -0.048          | -0.035          | 0.013           | 0.9000 |
| 1.0000                    | 0.010           | -0.009          | -0.019          | -0.024          | -0.036          | -0.012          | -0.045          | -0.046          | -0.001          |                 |                 |                 | -0.088          | -0.041          | 0.047           | 0.001           | -0.047          | -0.048          | -0.051          | -0.034          | 0.018           | 1.0000 |
| M = 2.232      α = 04.31  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.083           | 0.169           | 0.086           | 0.008           | 0.205           | 0.197           | -0.037          | 0.259           | 0.296           |                 |                 |                 | -0.042          | 0.311           | 0.353           | -0.030          | 0.336           | 0.366           | -0.034          | 0.210           |                 | 0.0000 |
| 0.0125                    | 0.035           | 0.140           | 0.104           | 0.011           | 0.162           | 0.172           | -0.042          | 0.201           | 0.244           | -0.060          | 0.225           | 0.285           | -0.050          | 0.252           | 0.302           | -0.039          | 0.274           | 0.313           | -0.052          |                 |                 | 0.0125 |
| 0.0250                    | 0.004           | 0.116           | 0.112           | -0.024          | 0.129           | 0.153           | -0.046          | 0.159           | 0.205           | -0.071          | 0.199           | 0.270           | -0.056          | 0.206           | 0.263           | -0.046          | 0.230           | 0.275           | -0.064          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | -0.011          | 0.086           | 0.097           | -0.032          | 0.094           | 0.126           | -0.052          | 0.120           | 0.172           |                 | 0.157           |                 | -0.065          | 0.153           | 0.218           | -0.055          | 0.192           | 0.247           | -0.068          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | -0.013          | 0.069           | 0.082           | -0.034          | 0.081           | 0.115           | -0.052          | 0.100           | 0.152           | -0.074          | 0.122           | 0.196           | -0.076          | 0.132           | 0.208           | -0.066          | 0.169           | 0.235           | -0.071          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.015          | 0.066           | 0.081           | -0.036          | 0.075           | 0.111           | -0.054          | 0.090           | 0.144           | -0.072          | 0.105           | 0.177           | -0.081          | 0.115           | 0.196           | -0.076          | 0.146           | 0.222           | -0.075          | 0.169           | 0.244           | 0.1000 |
| 0.1500                    | -0.029          | 0.060           | 0.089           | -0.048          | 0.067           | 0.115           | -0.058          | 0.076           | 0.135           | -0.073          | 0.086           | 0.159           | -0.078          | 0.090           | 0.169           | -0.090          | 0.122           | 0.212           | -0.080          | 0.151           | 0.231           | 0.1500 |
| 0.2000                    | -0.044          | 0.057           | 0.102           | -0.053          | 0.068           | 0.121           | -0.059          | 0.164           | 0.223           | -0.076          |                 |                 | -0.081          | 0.079           | 0.160           | -0.086          | 0.109           | 0.196           | -0.091          | 0.135           | 0.226           | 0.2000 |
| 0.3000                    | -0.052          | 0.047           | 0.099           | -0.062          | 0.069           | 0.131           | -0.066          | 0.156           | 0.222           |                 |                 |                 | -0.082          | 0.067           | 0.150           | -0.101          | 0.081           | 0.182           | -0.090          | 0.116           | 0.206           | 0.3000 |
| 0.4000                    | -0.076          | 0.044           | 0.121           | -0.072          | 0.042           | 0.114           | -0.071          | 0.108           | 0.109           |                 |                 |                 | -0.082          | 0.053           | 0.136           | -0.101          | 0.066           | 0.167           | -0.097          | 0.094           | 0.192           | 0.4000 |
| 0.5000                    | -0.075          | 0.032           | 0.107           | -0.073          | 0.029           | 0.101           | -0.071          | 0.093           | 0.104           |                 |                 |                 | -0.080          | 0.038           | 0.118           | -0.103          | 0.059           | 0.162           | -0.105          | 0.083           | 0.188           | 0.5000 |
| 0.6000                    | -0.027          | 0.022           | 0.050           | -0.073          | 0.019           | 0.092           | -0.073          | 0.022           | 0.095           |                 |                 |                 | -0.080          | 0.030           | 0.110           | -0.101          | 0.043           | 0.143           | -0.111          | 0.064           | 0.175           | 0.6000 |
| 0.7000                    | -0.031          | 0.021           | 0.052           | -0.073          | 0.015           | 0.089           | -0.072          | 0.021           | 0.093           |                 |                 |                 | -0.071          | 0.027           | 0.098           | -0.085          | 0.038           | 0.123           | -0.112          | 0.058           | 0.170           | 0.7000 |
| 0.8000                    | -0.067          | -0.004          | 0.063           | -0.073          | 0.005           | 0.078           | -0.072          | 0.014           | 0.086           |                 |                 |                 | -0.093          | 0.023           | 0.116           | -0.063          | 0.029           | 0.092           | -0.113          | 0.054           | 0.166           | 0.8000 |
| 0.9000                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Concluded

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |     |
| M = 2.236      α = 08.36 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.073          | 0.291           | 0.364           | -0.111          | 0.318           | 0.428           | -0.130          | 0.356           | 0.485           |                 |                 |                 | -0.145          | 0.382           | 0.527           | -0.114          | 0.383           | 0.497           | -0.111          |                 |                 |     |
| 0.0125                   | -0.086          | 0.255           | 0.341           | -0.117          | 0.274           | 0.391           | -0.131          | 0.298           | 0.430           | -0.164          | 0.316           | 0.479           | -0.136          | 0.336           | 0.472           | -0.120          | 0.359           | 0.478           | -0.139          |                 |                 |     |
| 0.0250                   | -0.093          | 0.224           | 0.318           | -0.121          | 0.238           | 0.359           | -0.133          | 0.255           | 0.388           | -0.146          | 0.278           | 0.424           | -0.132          | 0.298           | 0.430           | -0.124          | 0.335           | 0.459           | -0.155          | 0.392           | 0.0000          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0125          |     |
| 0.0500                   | -0.092          | 0.178           | 0.270           | -0.121          | 0.193           | 0.314           | -0.134          | 0.211           | 0.345           |                 | 0.241           |                 | -0.139          | 0.249           | 0.388           | -0.129          | 0.290           | 0.419           | -0.148          | 0.315           | 0.0250          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0750                   | -0.098          | 0.158           | 0.255           | -0.121          | 0.174           | 0.295           | -0.131          | 0.187           | 0.318           | -0.147          | 0.211           | 0.357           | -0.143          | 0.223           | 0.366           | -0.129          | 0.256           | 0.385           | -0.149          | 0.294           | 0.0500          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.1000                   | -0.098          | 0.152           | 0.250           | -0.123          | 0.165           | 0.288           | -0.132          | 0.172           | 0.304           | -0.144          | 0.193           | 0.336           | -0.147          | 0.203           | 0.350           | -0.137          | 0.240           | 0.377           | -0.148          | 0.286           | 0.0750          |     |
| 0.1500                   | -0.089          | 0.138           | 0.227           | -0.129          | 0.146           | 0.276           | -0.136          | 0.158           | 0.294           | -0.144          | 0.172           | 0.316           | -0.144          | 0.177           | 0.321           | -0.145          | 0.214           | 0.360           | -0.147          | 0.252           | 0.1000          |     |
| 0.2000                   | -0.099          | 0.126           | 0.225           | -0.129          | 0.142           | 0.268           | -0.136          | 0.142           | 0.268           | -0.145          | 0.172           | 0.316           | -0.146          | 0.163           | 0.309           | -0.140          | 0.195           | 0.335           | -0.159          | 0.235           | 0.1500          |     |
| 0.3000                   | -0.098          | 0.110           | 0.207           | -0.102          | 0.135           | 0.238           | -0.138          | 0.123           | 0.261           |                 |                 |                 | -0.146          | 0.140           | 0.284           | -0.150          | 0.165           | 0.315           | -0.141          | 0.208           | 0.2000          |     |
| 0.4000                   | -0.112          | 0.105           | 0.218           | -0.106          | 0.107           | 0.213           | -0.131          | 0.102           | 0.233           |                 |                 |                 | -0.144          | 0.140           | 0.284           | -0.150          | 0.165           | 0.315           | -0.141          | 0.208           | 0.2500          |     |
| 0.5000                   | -0.107          | 0.094           | 0.201           | -0.105          | 0.090           | 0.196           | -0.120          | 0.094           | 0.214           |                 |                 |                 | -0.146          | 0.119           | 0.266           | -0.150          | 0.148           | 0.298           | -0.155          | 0.180           | 0.3000          |     |
| 0.6000                   | -0.046          | 0.078           | 0.124           | -0.102          | 0.075           | 0.177           | -0.115          | 0.077           | 0.192           |                 |                 |                 | -0.146          | 0.101           | 0.248           | -0.151          | 0.134           | 0.285           | -0.158          | 0.168           | 0.3500          |     |
| 0.7000                   | -0.048          | 0.076           | 0.123           | -0.103          | 0.067           | 0.170           | -0.108          | 0.073           | 0.181           |                 |                 |                 | -0.141          | 0.091           | 0.232           | -0.147          | 0.117           | 0.264           | -0.163          | 0.150           | 0.4000          |     |
| 0.8000                   | -0.091          | 0.044           | 0.136           | -0.100          | 0.056           | 0.156           | -0.106          | 0.064           | 0.171           |                 |                 |                 | -0.132          | 0.084           | 0.216           | -0.142          | 0.107           | 0.249           | -0.159          | 0.142           | 0.4500          |     |
| 0.9000                   | -0.094          | 0.053           | 0.147           | -0.098          | 0.053           | 0.151           | -0.104          | 0.055           | 0.159           |                 |                 |                 | -0.145          | 0.078           | 0.223           | -0.140          | 0.097           | 0.237           | -0.153          | 0.131           | 0.5000          |     |
| 1.0000                   | -0.056          | 0.101           | 0.158           | -0.095          | 0.061           | 0.156           | -0.101          | 0.045           | 0.146           |                 |                 |                 | -0.158          | 0.066           | 0.224           | -0.134          | 0.083           | 0.217           | -0.147          | 0.132           | 0.5500          |     |
|                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | -0.171          | 0.048           | 0.219           | -0.122          | 0.067           | 0.189           | -0.142          | 0.144           | 0.6000          |     |
| M = 2.228      α = 12.41 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.153          | 0.379           | 0.532           | -0.151          | 0.406           | 0.557           | -0.174          | 0.420           | 0.594           |                 |                 |                 | -0.197          | 0.433           | 0.630           | -0.170          | 0.427           | 0.597           | -0.159          | 0.443           | 0.0000          |     |
| 0.0125                   | -0.152          | 0.364           | 0.516           | -0.160          | 0.373           | 0.533           | -0.174          | 0.372           | 0.546           | -0.181          | 0.400           | 0.581           | -0.178          | 0.402           | 0.580           | -0.170          | 0.417           | 0.587           | -0.178          |                 | 0.0125          |     |
| 0.0250                   | -0.151          | 0.344           | 0.495           | -0.166          | 0.344           | 0.510           | -0.174          | 0.337           | 0.512           | -0.185          | 0.373           | 0.559           | -0.168          | 0.376           | 0.544           | -0.170          | 0.404           | 0.574           | -0.189          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.149          | 0.288           | 0.437           | -0.166          | 0.298           | 0.464           | -0.173          | 0.306           | 0.480           |                 | 0.332           |                 | -0.175          | 0.338           | 0.513           | -0.170          | 0.371           | 0.541           | -0.186          | 0.393           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.153          | 0.267           | 0.421           | -0.166          | 0.274           | 0.440           | -0.172          | 0.284           | 0.456           | -0.181          | 0.298           | 0.479           | -0.179          | 0.313           | 0.492           | -0.170          | 0.346           | 0.516           | -0.185          | 0.380           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.157          | 0.253           | 0.411           | -0.166          | 0.254           | 0.420           | -0.172          | 0.273           | 0.445           | -0.178          | 0.285           | 0.463           | -0.181          | 0.293           | 0.473           | -0.175          | 0.328           | 0.503           | -0.184          | 0.376           | 0.1000          |     |
| 0.1500                   | -0.158          | 0.237           | 0.394           | -0.167          | 0.238           | 0.405           | -0.174          | 0.249           | 0.423           | -0.177          | 0.257           | 0.435           | -0.177          | 0.267           | 0.445           | -0.183          | 0.299           | 0.483           | -0.183          | 0.348           | 0.1500          |     |
| 0.2000                   | -0.146          | 0.221           | 0.367           | -0.167          | 0.233           | 0.400           | -0.175          | 0.306           | 0.481           | -0.180          |                 |                 | -0.177          | 0.251           | 0.430           | -0.171          | 0.282           | 0.453           | -0.194          | 0.325           | 0.2000          |     |
| 0.3000                   | -0.134          | 0.195           | 0.328           | -0.166          | 0.212           | 0.378           | -0.176          | 0.200           | 0.377           |                 |                 |                 | -0.177          | 0.216           | 0.393           | -0.182          | 0.251           | 0.433           | -0.175          | 0.291           | 0.2500          |     |
| 0.4000                   | -0.136          | 0.189           | 0.325           | -0.168          | 0.184           | 0.352           | -0.174          | 0.181           | 0.355           |                 |                 |                 | -0.177          | 0.197           | 0.374           | -0.181          | 0.235           | 0.416           | -0.185          | 0.281           | 0.3000          |     |
| 0.5000                   | -0.129          | 0.163           | 0.292           | -0.161          | 0.163           | 0.324           | -0.170          | 0.161           | 0.331           |                 |                 |                 | -0.179          | 0.179           | 0.358           | -0.180          | 0.213           | 0.393           | -0.188          | 0.255           | 0.3500          |     |
| 0.6000                   | -0.057          | 0.153           | 0.210           | -0.145          | 0.148           | 0.293           | -0.173          | 0.148           | 0.321           |                 |                 |                 | -0.176          | 0.165           | 0.341           | -0.182          | 0.202           | 0.383           | -0.189          | 0.235           | 0.4000          |     |
| 0.7000                   | -0.058          | 0.146           | 0.204           | -0.134          | 0.137           | 0.271           | -0.171          | 0.148           | 0.321           |                 |                 |                 | -0.169          | 0.153           | 0.322           | -0.179          | 0.186           | 0.366           | -0.186          | 0.224           | 0.4500          |     |
| 0.8000                   | -0.106          | 0.118           | 0.224           | -0.125          | 0.129           | 0.253           | -0.168          | 0.134           | 0.303           |                 |                 |                 | -0.173          | 0.149           | 0.322           | -0.177          | 0.167           | 0.344           | -0.184          | 0.212           | 0.5000          |     |
| 0.9000                   | -0.114          | 0.118           | 0.232           | -0.117          | 0.119           | 0.236           | -0.166          | 0.118           | 0.285           |                 |                 |                 | -0.183          | 0.131           | 0.314           | -0.177          | 0.154           | 0.332           | -0.183          | 0.214           | 0.5500          |     |
| 1.0000                   | -0.083          | 0.144           | 0.227           | -0.110          | 0.107           | 0.218           | -0.164          | 0.095           | 0.259           |                 |                 |                 | -0.200          | 0.099           | 0.299           | -0.179          | 0.149           | 0.329           | -0.183          | 0.228           | 0.6000          |     |
| M = 2.232      α = 16.42 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.186          | 0.367           | 0.553           | -0.181          | 0.447           | 0.628           | -0.188          | 0.438           | 0.626           |                 |                 |                 | -0.217          | 0.458           | 0.675           | -0.179          | 0.452           | 0.631           | -0.171          | 0.431           | 0.0000          |     |
| 0.0125                   | -0.182          | 0.384           | 0.566           | -0.186          | 0.428           | 0.613           | -0.189          | 0.431           | 0.620           | -0.192          | 0.451           | 0.643           | -0.192          | 0.456           | 0.648           | -0.179          | 0.468           | 0.647           | -0.185          |                 | 0.0125          |     |
| 0.0250                   | -0.178          | 0.388           | 0.567           | -0.188          | 0.408           | 0.596           | -0.190          | 0.423           | 0.612           | -0.192          | 0.445           | 0.637           | -0.179          | 0.449           | 0.628           | -0.179          | 0.476           | 0.655           | -0.194          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.176          | 0.357           | 0.532           | -0.186          | 0.370           | 0.555           | -0.189          | 0.402           | 0.591           |                 | 0.414           |                 | -0.189          | 0.422           | 0.611           | -0.179          | 0.465           | 0.644           | -0.193          | 0.468           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.179          | 0.328           | 0.507           | -0.185          | 0.356           | 0.541           | -0.188          | 0.378           | 0.565           | -0.185          | 0.385           | 0.570           | -0.190          | 0.406           | 0.596           | -0.180          | 0.443           | 0.624           | -0.191          | 0.464           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.181          | 0.325           | 0.507           | -0.185          | 0.340           | 0.525           | -0.187          | 0.366           | 0.553           | -0.185          | 0.368           | 0.553           | -0.192          | 0.387           | 0.579           | -0.180          | 0.428           | 0.608           | -0.189          | 0.450           | 0.1000          |     |
| 0.1500                   | -0.184          | 0.307           | 0.491           | -0.186          | 0.326           | 0.512           | -0.189          | 0.334           | 0.523           | -0.186          | 0.342           | 0.528           | -0.188          | 0.356           | 0.544           | -0.186          | 0.406           | 0.593           | -0.188          | 0.428           | 0.1500          |     |
| 0.2000                   | -0.180          | 0.289           | 0.468           | -0.186          | 0.322           | 0.508           | -0.189          | 0.364           | 0.523           | -0.186          |                 |                 | -0.190          | 0.337           | 0.527           | -0.183          | 0.378           | 0.561           | -0.201          | 0.410           | 0.2000          |     |
| 0.3000                   | -0.171          | 0.278           | 0.449           | -0.186          | 0.298           | 0.483           | -0.189          | 0.285           | 0.473           |                 |                 |                 | -0.189          | 0.296           | 0.486           | -0.188          | 0.343           | 0.531           | -0.178          | 0.384           | 0.2500          |     |
| 0.4000                   | -0.167          | 0.255           | 0.422           | -0.189          | 0.265           | 0.454           | -0.188          | 0.261           | 0.449           |                 |                 |                 | -0.188          | 0.287           | 0.475           | -0.189          | 0.318           | 0.507           | -0.191          | 0.358           | 0.3000          |     |
| 0.5000                   | -0.158          | 0.247           | 0.405           | -0.184          | 0.239           | 0.423           | -0.185          | 0.243           | 0.428           |                 |                 |                 | -0.190          | 0.262           | 0.452           | -0.190          | 0.262           | 0.452           | -0.190          | 0.343           | 0.3500          |     |
| 0.6000                   | -0.079          | 0.226           | 0.305           | -0.175          | 0.222           | 0.397           | -0.187          | 0.231           | 0.418           |                 |                 |                 | -0.188          | 0.249           | 0.437           | -0.189          | 0.283           | 0.472           | -0.197          | 0.324           | 0.4000          |     |
| 0.7000                   | -0.077          | 0.229           | 0.306           | -0.174          | 0.218           | 0.391           | -0.186          | 0.225           | 0.411           |                 |                 |                 | -0.183          | 0.238           | 0.421           | -0.188          | 0.270           | 0.458           | -0.196          | 0.313           | 0.4500          |     |
| 0.8000                   | -0.127          | 0.186           | 0.283           | -0.166          | 0.197           | 0.363           | -0.185          | 0.210           | 0.395           |                 |                 |                 | -0.184          | 0.221           | 0.405           | -0.188          | 0.251           | 0.439           | -0.194          | 0.309           | 0.5000          |     |
| 0.9000                   | -0.137          | 0.194           | 0.330           | -0.171          | 0.183           | 0.347           | -0.187          | 0.195           | 0.382           |                 |                 |                 | -0.190          | 0.209           | 0.399           | -0.187          | 0.237           | 0.425           | -0.194          | 0.303           | 0.5500          |     |
| 1.0000                   | -0.106          | 0.251           | 0.357           | -0.139          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.7^\circ$

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| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 0.700      α = -04.00 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.298           | -0.846          | -1.144          | 0.246           | -0.931          | -1.177          | 0.263           | -0.839          | -1.102          | 0.205           | -0.827          | -1.032          | 0.307           | -0.908          | -1.215          | 0.288           | -0.798          | -1.086          | 0.258           | -0.686          |                 | 0.0000 |
| 0.0125                    | 0.219           | -0.510          | -0.730          | 0.218           | -0.667          | -0.885          | 0.209           | -0.705          | -0.914          | 0.205           | -0.827          | -1.032          | 0.224           | -0.850          | -1.073          | 0.246           | -0.814          | -1.060          | 0.249           |                 |                 | 0.0125 |
| 0.0250                    | 0.169           | -0.301          | -0.470          | 0.191           | -0.475          | -0.666          | 0.164           | -0.580          | -0.744          | 0.159           | -0.445          | -0.603          | 0.163           | -0.747          | -0.910          | 0.209           | -0.824          | -1.033          | 0.235           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.150           | -0.263          | -0.413          | 0.134           | -0.311          | -0.445          | 0.102           | -0.354          | -0.456          |                 | -0.385          |                 | 0.111           | -0.405          | -0.516          | 0.152           | -0.824          | -0.976          | 0.193           | -0.680          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.067           | -0.339          | -0.406          | 0.075           | -0.353          | -0.428          | 0.116           | -0.796          | -0.912          | 0.166           | -0.678          |                 | 0.0640 |
| 0.0750                    | 0.091           | -0.228          | -0.319          | 0.093           | -0.278          | -0.370          | 0.073           | -0.319          | -0.391          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.064           | -0.218          | -0.282          | 0.064           | -0.272          | -0.336          | 0.051           | -0.288          | -0.339          | 0.041           | -0.311          | -0.353          | 0.053           | -0.327          | -0.380          | 0.093           | -0.741          | -0.834          | 0.149           | -0.677          | -0.826          | 0.1000 |
| 0.1500                    | 0.050           | -0.193          | -0.243          | 0.043           | -0.248          | -0.291          | 0.027           | -0.256          | -0.284          | 0.021           | -0.283          | -0.304          | 0.030           | -0.294          | -0.324          | 0.064           | -0.543          | -0.607          | 0.117           | -0.681          | -0.799          | 0.1500 |
| 0.2000                    | 0.027           | -0.181          | -0.208          | 0.026           | -0.219          | -0.245          | 0.018           | -0.217          | -0.235          | 0.007           |                 |                 | 0.015           | -0.269          | -0.284          | 0.047           | -0.373          | -0.420          | 0.100           | -0.684          | -0.784          | 0.2000 |
| 0.3000                    | 0.010           | -0.182          | -0.192          | 0.015           | -0.204          | -0.219          | -0.001          | -0.222          | -0.221          |                 |                 |                 | 0.002           | -0.244          | -0.246          | 0.041           | -0.254          | -0.295          | 0.069           | -0.703          | -0.772          | 0.3000 |
| 0.4000                    | -0.005          | -0.186          | -0.181          | -0.004          | -0.196          | -0.192          | -0.008          | -0.206          | -0.198          |                 |                 |                 | -0.005          | -0.213          | -0.208          | 0.058           | -0.233          | -0.291          | 0.046           | -0.687          | -0.733          | 0.4000 |
| 0.5000                    | -0.018          | -0.180          | -0.161          | -0.014          | -0.189          | -0.176          | -0.012          | -0.187          | -0.175          |                 |                 |                 | -0.002          | -0.191          | -0.189          | 0.053           | -0.201          | -0.254          | 0.035           | -0.617          | -0.652          | 0.5000 |
| 0.6000                    | -0.019          | -0.171          | -0.152          | -0.018          | -0.178          | -0.160          | -0.016          | -0.167          | -0.151          |                 |                 |                 | -0.001          | -0.168          | -0.167          | 0.038           | -0.177          | -0.215          | 0.023           | -0.492          | -0.514          | 0.6000 |
| 0.7000                    | -0.024          | -0.145          | -0.121          | -0.029          | -0.161          | -0.132          | -0.040          | -0.142          | -0.103          |                 |                 |                 | -0.073          | -0.142          | -0.069          | 0.019           | -0.142          | -0.161          | 0.012           | -0.316          | -0.327          | 0.7000 |
| 0.8000                    | -0.067          | -0.124          | -0.056          | -0.060          | -0.124          | -0.064          | -0.082          | -0.113          | -0.031          |                 |                 |                 | -0.116          | -0.107          | 0.009           | 0.010           | -0.109          | -0.119          | 0.004           | -0.156          | -0.159          | 0.8000 |
| 0.9000                    | -0.073          | -0.093          | -0.020          | -0.071          | -0.079          | -0.009          | -0.079          | -0.067          | 0.013           |                 |                 |                 | -0.082          | -0.057          | 0.025           | 0.012           | -0.059          | -0.071          | 0.019           | -0.039          | -0.020          | 0.9000 |
| 1.0000                    | -0.041          | -0.053          | -0.012          | -0.060          | -0.025          | 0.035           | -0.030          | -0.002          | 0.028           |                 |                 |                 | 0.027           | 0.009           | -0.019          | 0.023           | 0.007           | -0.016          | -0.057          | 0.034           | 0.091           | 1.0000 |
| M = 0.698      α = 00.00  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.003          | -0.852          | -5.849          | 0.237           | -0.726          | -5.963          | 0.121           | -0.251          | -5.372          | -0.018          | -0.052          | -4.933          | -0.070          | -0.027          | 4.857           | -0.010          | -0.163          |                 |                 |                 |                 | 0.0000 |
| 0.0125                    | 0.099           | -0.514          | -5.613          | 0.160           | -0.507          | -5.667          | 0.052           | -0.206          | -5.258          | -0.026          | -0.106          | -4.980          | -0.067          | -0.081          | -4.914          | -0.094          | -0.071          | 4.877           | -0.047          |                 |                 | 0.0125 |
| 0.0250                    | 0.149           | -0.297          | -5.446          | 0.100           | -0.367          | -5.466          | 0.000           | -0.176          | -5.176          | -0.062          | -0.112          | -4.950          | -0.099          | -0.103          | -4.804          | -0.113          | -0.103          | 4.791           | -0.074          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.091           | -0.227          | -5.318          | 0.031           | -0.323          | -5.354          | -0.052          | -0.162          | -5.110          |                 | -0.128          |                 | -0.116          | -0.126          | -4.910          | -0.133          | -0.131          | 4.798           | -0.097          | -0.144          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.040           | -0.192          | -5.232          | -0.011          | -0.240          | -5.229          | -0.073          | -0.151          | -4.978          | -0.109          | -0.131          | -4.922          | -0.125          | -0.127          | -4.802          | -0.144          | -0.131          | 4.887           | -0.100          | -0.140          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.002           | -0.157          | -5.159          | -0.039          | -0.202          | -5.163          | -0.087          | -0.142          | -4.955          | -0.115          | -0.128          | -4.913          | -0.130          | -0.130          | -4.699          | -0.141          | -0.134          | 4.792           | -0.100          | -0.136          | -4.936          | 0.1000 |
| 0.1500                    | -0.045          | -0.118          | -4.972          | -0.058          | -0.164          | -5.107          | -0.097          | -0.132          | -4.936          | -0.114          | -0.128          | -4.914          | -0.127          | -0.131          | -4.804          | -0.135          | -0.134          | 4.799           | -0.098          | -0.133          | -4.936          | 0.1500 |
| 0.2000                    | -0.060          | -0.082          | -4.921          | -0.078          | -0.135          | -4.957          | -0.098          | -0.103          | -4.805          | -0.113          |                 |                 | -0.122          | -0.131          | -4.810          | -0.123          | -0.134          | -4.910          | -0.092          | -0.136          | -4.944          | 0.2000 |
| 0.3000                    | -0.084          | -0.064          | 4.880           | -0.093          | -0.109          | -4.915          | -0.111          | -0.119          | -4.809          |                 |                 |                 | -0.117          | -0.127          | -4.810          | -0.098          | -0.134          | -4.936          | -0.085          | -0.131          | -4.946          | 0.3000 |
| 0.4000                    | -0.097          | -0.060          | 4.863           | -0.102          | -0.095          | 4.792           | -0.105          | -0.110          | -4.805          |                 |                 |                 | -0.108          | -0.121          | -4.913          | -0.053          | -0.123          | -4.971          | -0.078          | -0.122          | -4.944          | 0.4000 |
| 0.5000                    | -0.105          | -0.064          | 4.859           | -0.101          | -0.091          | 4.790           | -0.099          | -0.104          | -4.805          |                 |                 |                 | -0.092          | -0.109          | -4.918          | -0.011          | -0.111          | -5.000          | -0.063          | -0.107          | -4.943          | 0.5000 |
| 0.6000                    | -0.100          | -0.069          | 4.870           | -0.092          | -0.087          | 4.796           | -0.097          | -0.095          | 4.798           |                 |                 |                 | -0.085          | -0.101          | -4.915          | 0.007           | -0.102          | -5.109          | -0.054          | -0.096          | -4.942          | 0.6000 |
| 0.7000                    | -0.090          | -0.068          | 4.878           | -0.101          | -0.081          | 4.880           | -0.119          | -0.084          | 4.864           |                 |                 |                 | -0.179          | -0.089          | 4.809           | -0.002          | -0.084          | -4.982          | -0.044          | -0.079          | -4.935          | 0.7000 |
| 0.8000                    | -0.140          | -0.066          | 4.826           | -0.134          | -0.072          | 4.838           | -0.162          | -0.072          | 4.810           |                 |                 |                 | -0.211          | -0.070          | 4.859           | -0.002          | -0.064          | -4.962          | -0.026          | -0.060          | -4.934          | 0.8000 |
| 0.9000                    | -0.131          | -0.059          | 4.828           | -0.137          | -0.049          | 4.812           | -0.138          | -0.045          | 4.807           |                 |                 |                 | -0.145          | -0.038          | 4.893           | 0.012           | -0.030          | -4.942          | -0.017          | -0.027          | -4.911          | 0.9000 |
| 1.0000                    | -0.062          | -0.047          | 4.885           | -0.108          | -0.012          | 4.804           | -0.046          | -0.003          | 4.856           |                 |                 |                 | 0.019           | 0.006           | -4.914          | 0.040           | 0.018           | -4.922          | -0.016          | 0.019           | 4.863           | 1.0000 |
| M = 0.697      α = 03.91  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.124           | -1.725          | -1.850          | 0.057           | -0.459          | -0.516          | -0.264          | -0.150          | 0.114           | -1.050          | 0.266           | 1.316           | -0.821          | 0.250           | 1.070           | -0.600          | 0.184           |                 |                 |                 |                 | 0.0000 |
| 0.0125                    | 0.236           | -1.218          | -1.454          | 0.033           | -0.457          | -0.490          | -0.269          | -0.122          | 0.147           | -0.683          | 0.154           | 0.837           | -0.820          | 0.195           | 1.015           | -0.829          | 0.216           | 1.045           | -0.607          |                 |                 | 0.0125 |
| 0.0250                    | 0.279           | -0.827          | -1.106          | 0.001           | -0.430          | -0.431          | -0.275          | -0.098          | 0.177           | -0.450          | 0.106           | 0.557           | -0.638          | 0.142           | 0.781           | -0.833          | 0.185           | 1.019           | -0.612          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.161           | -0.397          | -0.558          | -0.088          | -0.297          | -0.209          | -0.291          | -0.062          | 0.229           | -0.420          | 0.090           | 0.511           | -0.827          | 0.134           | 0.961           | -0.614          | 0.169           |                 |                 |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.048           | -0.243          | -0.290          | -0.176          | -0.176          | 0.001           | -0.297          | -0.040          | 0.258           | -0.331          | 0.033           | 0.364           | -0.356          | 0.062           | 0.417           | -0.787          | 0.090           | 0.877           | -0.614          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | -0.032          | -0.198          | -0.166          | -0.203          | -0.134          | 0.069           | -0.300          | -0.027          | 0.273           | -0.316          | 0.023           | 0.338           | -0.325          | 0.041           | 0.366           | -0.689          | 0.065           | 0.754           | -0.614          | 0.110           | 0.724           | 0.1000 |
| 0.1500                    | -0.135          | -0.142          | -0.007          | -0.233          | -0.060          | 0.172           | -0.285          | -0.024          | 0.261           | -0.294          | 0.294           |                 | -0.291          | 0.015           | 0.306           | -0.497          | 0.034           | 0.531           | -0.608          | 0.085           | 0.693           | 0.1500 |
| 0.2000                    | -0.185          | -0.066          | 0.119           | -0.238          | -0.036          | 0.203           | -0.270          | -0.006          | 0.263           | -0.276          |                 |                 | -0.268          | -0.005          | 0.263           | -0.352          | 0.014           | 0.366           | -0.604          | 0.057           | 0.661           | 0.2000 |
| 0.3000                    | -0.210          | -0.046          | 0.164           | -0.238          | -0.029          | 0.210           | -0.254          | -0.039          | 0.215           | -0.242          | -0.029          | 0.213           | -0.241          | -0.013          | 0.228           | -0.589          | 0.024           | 0.614           | 0.3000          |                 |                 | 0.3000 |
| 0.4000                    | -0.216          | -0.036          | 0.179           | -0.226          | -0.035          | 0.190           | -0.231          | -0.050          | 0.181           | -0.223          | -0.035          | 0.188           | -0.167          | -0.023          | 0.144           | -0.552          | 0.003           | 0.555           | 0.4000          |                 |                 | 0.4000 |
| 0.5000                    | -0.204          | -0.041          | 0.163           | -0.213          | -0.052          | 0.161           | -0.213          | -0.054          | 0.159           | -0.198          | -0.045          | 0.153           | -0.110          | -0.028          | 0.082           | -0.466          | -0.007          | 0.459           | 0.5000          |                 |                 | 0.5000 |
| 0.6000                    | -0.186          | -0.053          | 0.134           | -0.204          | -0.057          | 0.143           | -0.204          | -0.057          | 0.143           | -0.269          | -0.055          | 0.214           | -0.068          | -0.041          | 0.042           | -0.359          | -0.021          | 0.338           | 0.6000          |                 |                 | 0.6000 |
| 0.7000                    | -0.178          | -0.050          | 0.129           | -0.198          | -0.065          | 0.133           | -0.209          | -0.058          | 0.152           | -0.269          | -0.055          | 0.214           | -0.068          | -0.041          | 0.042           | -0.359          | -0.021          | 0.338           | 0.7000          |                 |                 | 0.7000 |
| 0.8000                    | -0.214          | -0.064          | 0.150           | -0.219          | -0.066          | 0.153           | -0.245          | -0.059          | 0.186           | -0.296          | -0.052          | 0.244           | -0.049          | -0.043          | 0.006           | -0.131          | -0.021          | 0.110           | 0.8000          |                 |                 | 0.8    |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.7^\circ$  - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |     |
| M = 0.699      α = 07.96 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.158          | -0.247          | -0.090          | -0.431          | -0.304          | 0.127           | -0.710          | -0.284          | 0.427           | -0.629          | 0.168           | 0.797           | -0.754          | 0.160           | 0.914           | -0.690          | 0.227           | 0.0000          |                 |                 |                 |     |
| 0.0125                   | -0.154          | -0.140          | 0.014           | -0.442          | -0.080          | 0.362           | -0.722          |                 | 0.722           | -0.650          | 0.202           | 0.853           | -0.749          | 0.221           | 0.969           | -0.688          |                 | 0.0125          |                 |                 |                 |     |
| 0.0250                   | -0.163          | -0.055          | 0.108           | -0.460          | 0.077           | 0.537           | -0.716          | 0.184           | 0.900           | -0.593          | 0.218           | 0.811           | -0.665          | 0.218           | 0.883           | -0.746          | 0.254           | 0.999           | -0.686          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.221          | 0.049           | 0.269           | -0.516          | 0.190           | 0.707           | -0.655          | 0.254           | 0.909           |                 | 0.221           |                 | -0.675          | 0.194           | 0.869           | -0.747          | 0.237           | 0.984           | -0.685          | 0.238           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.274          | 0.139           | 0.413           | -0.559          | 0.216           | 0.775           | -0.617          | 0.228           | 0.845           | -0.601          | 0.181           | 0.782           | -0.672          | 0.177           | 0.848           | -0.754          | 0.211           | 0.965           | -0.682          | 0.233           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.329          | 0.158           | 0.487           | -0.566          | 0.208           | 0.774           | -0.604          | 0.194           | 0.798           | -0.595          | 0.157           | 0.752           | -0.652          | 0.159           | 0.812           | -0.757          | 0.190           | 0.947           | -0.679          | 0.225           | 0.1000          |     |
| 0.1500                   | -0.390          | 0.156           | 0.547           | -0.574          | 0.166           | 0.740           | -0.585          | 0.128           | 0.714           | -0.570          | 0.122           | 0.692           | -0.598          | 0.129           | 0.726           | -0.771          | 0.157           | 0.928           | -0.672          | 0.211           | 0.890           |     |
| 0.2000                   | -0.405          | 0.123           | 0.528           | -0.573          | 0.120           | 0.692           | -0.581          | 0.117           | 0.697           | -0.548          |                 |                 | -0.540          | 0.102           | 0.642           | -0.792          | 0.132           | 0.923           | -0.664          | 0.166           | 0.830           |     |
| 0.3000                   | -0.396          | 0.071           | 0.467           | -0.547          | 0.077           | 0.624           | -0.565          | 0.063           | 0.628           |                 |                 |                 | -0.450          | 0.072           | 0.522           | -0.864          | 0.091           | 0.955           | -0.654          | 0.124           | 0.778           |     |
| 0.4000                   | -0.336          | 0.045           | 0.382           | -0.496          | 0.044           | 0.540           | -0.539          | 0.039           | 0.578           |                 |                 |                 | -0.386          | 0.051           | 0.437           | -0.926          | 0.063           | 0.989           | -0.635          | 0.089           | 0.724           |     |
| 0.5000                   | -0.273          | 0.029           | 0.303           | -0.444          | 0.038           | 0.482           | -0.514          | 0.024           | 0.538           |                 |                 |                 | -0.327          | 0.033           | 0.360           | -0.885          | 0.048           | 0.933           | -0.610          | 0.065           | 0.675           |     |
| 0.6000                   | -0.200          | 0.013           | 0.212           | -0.362          | 0.015           | 0.377           | -0.475          | 0.010           | 0.484           |                 |                 |                 | -0.230          | 0.015           | 0.245           | -0.636          | 0.022           | 0.858           | -0.583          | 0.028           | 0.610           |     |
| 0.7000                   | -0.151          | 0.011           | 0.162           | -0.292          | -0.007          | 0.285           | -0.411          | -0.004          | 0.408           |                 |                 |                 | -0.171          | -0.002          | 0.169           | -0.341          | 0.002           | 0.343           | -0.564          | 0.002           | 0.566           |     |
| 0.8000                   | -0.121          | -0.012          | 0.108           | -0.231          | -0.011          | 0.220           | -0.373          | -0.020          | 0.354           |                 |                 |                 | -0.205          | -0.016          | 0.190           | -0.114          | -0.012          | 0.102           | -0.540          | -0.036          | 0.504           |     |
| 0.9000                   | -0.099          | -0.022          | 0.077           | -0.203          | -0.020          | 0.182           | -0.321          | -0.029          | 0.292           |                 |                 |                 | -0.161          | -0.023          | 0.138           | 0.021           | -0.026          | -0.047          | -0.515          | -0.106          | 0.410           |     |
| 1.0000                   | -0.085          | -0.017          | 0.067           | -0.206          | -0.034          | 0.172           | -0.255          | -0.032          | 0.223           |                 |                 |                 | -0.038          | -0.025          | 0.013           | 0.064           | -0.040          | -0.105          | -0.490          | -0.208          | 0.282           |     |
| M = 0.699      α = 11.96 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -1.602          | 0.228           | 1.830           | -0.731          | -0.327          | 0.404           | -1.296          | 0.095           | 1.391           | -1.281          | 0.167           | 1.448           | -1.211          | 0.198           | 1.409           | -0.995          | 0.148           | 1.143           | -0.459          | 0.167           | 0.0000          |     |
| 0.0125                   | -0.957          | 0.261           | 1.218           | -1.314          | 0.019           | 1.334           | -1.298          | 0.214           | 1.512           | -1.281          |                 | 1.448           | -1.198          | 0.140           | -0.995          | 0.148           | 1.143           | -0.459          |                 |                 | 0.0125          |     |
| 0.0250                   | -0.564          | 0.282           | 0.845           | -1.548          | 0.237           | 1.785           | -1.324          | 0.287           | 1.611           | -1.282          | 0.275           | 1.557           | -1.231          | 0.286           | 1.517           | -0.977          | 0.250           | 1.227           | -0.470          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.529          | 0.287           | 0.816           | -0.967          | 0.285           | 1.251           | -1.449          | 0.292           | 1.742           |                 | 0.291           |                 | -1.253          | 0.304           | 1.557           | -0.975          | 0.294           | 1.269           | -0.488          | 0.244           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.484          | 0.267           | 0.751           | -0.548          | 0.280           | 0.829           | -1.503          | 0.274           | 1.778           | -1.400          | 0.272           | 1.673           | -1.296          | 0.295           | 1.590           | -0.973          | 0.294           | 1.267           | -0.506          | 0.254           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.474          | 0.241           | 0.714           | -0.528          | 0.263           | 0.791           | -1.244          | 0.260           | 1.504           | -1.498          | 0.259           | 1.757           | -1.292          | 0.277           | 1.569           | -0.967          | 0.283           | 1.249           | -0.520          | 0.245           | 0.765           |     |
| 0.1500                   | -0.486          | 0.228           | 0.714           | -0.515          | 0.239           | 0.754           | -0.609          | 0.228           | 0.837           | -1.489          | 0.228           | 1.717           | -1.493          | 0.247           | 1.740           | -0.978          | 0.256           | 1.233           | -0.535          | 0.226           | 0.761           |     |
| 0.2000                   | -0.495          | 0.213           | 0.708           | -0.489          | 0.220           | 0.709           | -0.488          | 0.220           | 0.708           | -0.923          |                 |                 | -1.626          | 0.219           | 1.845           | -0.954          | 0.229           | 1.183           | -0.548          | 0.204           | 0.752           |     |
| 0.3000                   | -0.484          | 0.177           | 0.661           | -0.465          | 0.185           | 0.650           | -0.437          | 0.166           | 0.603           |                 |                 |                 | -0.835          | 0.178           | 1.013           | -0.787          | 0.183           | 0.970           | -0.562          | 0.163           | 0.726           |     |
| 0.4000                   | -0.439          | 0.150           | 0.589           | -0.402          | 0.159           | 0.561           | -0.380          | 0.135           | 0.516           |                 |                 |                 | -0.403          | 0.147           | 0.551           | -0.653          | 0.140           | 0.793           | -0.560          | 0.122           | 0.682           |     |
| 0.5000                   | -0.376          | 0.126           | 0.502           | -0.354          | 0.122           | 0.476           | -0.307          | 0.110           | 0.417           |                 |                 |                 | -0.221          | 0.115           | 0.336           | -0.864          | 0.110           | 0.974           | -0.544          | 0.087           | 0.630           |     |
| 0.6000                   | -0.318          | 0.100           | 0.418           | -0.272          | 0.083           | 0.354           | -0.223          | 0.082           | 0.305           |                 |                 |                 | -0.036          | 0.081           | 0.117           | -0.854          | 0.069           | 0.922           | -0.536          | 0.039           | 0.575           |     |
| 0.7000                   | -0.260          | 0.069           | 0.329           | -0.210          | 0.067           | 0.277           | -0.151          | 0.050           | 0.201           |                 |                 |                 | -0.027          | 0.047           | 0.075           | -0.536          | 0.033           | 0.569           | -0.528          | -0.004          | 0.523           |     |
| 0.8000                   | -0.206          | 0.016           | 0.222           | -0.205          | 0.032           | 0.237           | -0.212          | 0.014           | 0.226           |                 |                 |                 | -0.262          | 0.010           | 0.272           | -0.485          | -0.021          | 0.464           | -0.513          | -0.059          | 0.454           |     |
| 0.9000                   | -0.217          | -0.009          | 0.208           | -0.224          | 0.008           | 0.232           | -0.241          | -0.022          | 0.218           |                 |                 |                 | -0.269          | -0.030          | 0.240           | -0.488          | -0.099          | 0.389           | -0.501          | -0.150          | 0.351           |     |
| 1.0000                   | -0.293          | -0.006          | 0.288           | -0.267          | -0.003          | 0.264           | -0.238          | -0.059          | 0.179           |                 |                 |                 | -0.049          | -0.072          | -0.023          | -0.546          | -0.201          | 0.345           | -0.491          | -0.276          | 0.215           |     |
| M = 0.698      α = 16.02 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -1.157          | 0.299           | 1.456           | -1.779          | 0.126           | 1.905           | -1.614          | -0.043          | 1.570           | -1.401          | -0.112          | 1.289           | -1.019          | -0.135          | 0.883           | -0.402          | 0.110           |                 |                 |                 | 0.0000          |     |
| 0.0125                   | -1.898          | 0.385           | 2.283           | -1.720          | 0.256           | 1.975           | -1.570          | 0.194           | 1.764           | -1.483          | 0.103           | 1.586           | -1.422          | 0.141           | 1.562           | -0.977          | 0.088           | 1.065           | -0.429          |                 | 0.0125          |     |
| 0.0250                   | -2.141          | 0.443           | 2.584           | -1.691          | 0.345           | 2.035           | -1.566          | 0.346           | 1.913           | -1.478          | 0.316           | 1.794           | -1.434          | 0.305           | 1.739           | -0.944          | 0.242           | 1.186           | -0.449          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -1.136          | 0.472           | 1.608           | -1.724          | 0.402           | 2.126           | -1.679          | 0.393           | 2.072           |                 | 0.381           |                 | -1.433          | 0.373           | 1.806           | -0.907          | 0.340           | 1.247           | -0.473          | 0.243           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.783          | 0.449           | 1.232           | -1.929          | 0.412           | 2.340           | -1.705          | 0.392           | 2.098           | -1.674          | 0.381           | 2.054           | -1.517          | 0.387           | 1.905           | -0.873          | 0.374           | 1.246           | -0.486          | 0.269           | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.766          | 0.419           | 1.185           | -1.783          | 0.397           | 2.180           | -1.756          | 0.386           | 2.142           | -1.602          | 0.379           | 1.980           | -1.573          | 0.383           | 1.956           | -0.830          | 0.369           | 1.199           | -0.504          | 0.274           | 0.778           |     |
| 0.1500                   | -0.736          | 0.384           | 1.121           | -0.978          | 0.364           | 1.342           | -1.898          | 0.355           | 2.254           | -1.598          | 0.353           | 1.952           | -1.492          | 0.360           | 1.852           | -0.797          | 0.350           | 1.147           | -0.535          | 0.262           | 0.798           |     |
| 0.2000                   | -0.666          | 0.344           | 1.010           | -0.734          | 0.346           | 1.080           | -1.332          | 0.345           | 1.677           | -1.951          |                 |                 | -1.470          | 0.335           | 1.805           | -0.753          | 0.330           | 1.083           | -0.568          | 0.249           | 0.817           |     |
| 0.3000                   | -0.619          | 0.290           | 0.908           | -0.620          | 0.299           | 0.919           | -0.758          | 0.287           | 1.045           |                 |                 |                 | -1.804          | 0.290           | 2.094           | -0.571          | 0.278           | 0.849           | -0.621          | 0.212           | 0.833           |     |
| 0.4000                   | -0.587          | 0.259           | 0.847           | -0.487          | 0.257           | 0.744           | -0.507          | 0.248           | 0.755           |                 |                 |                 | -1.163          | 0.255           | 1.418           | -0.394          | 0.225           | 0.619           | -0.664          | 0.169           | 0.833           |     |
| 0.5000                   | -0.461          | 0.228           | 0.689           | -0.379          | 0.235           | 0.614           | -0.341          | 0.209           | 0.550           |                 |                 |                 | -0.646          | 0.210           | 0.855           | -0.567          | 0.185           | 0.752           | -0.678          | 0.121           | 0.799           |     |
| 0.6000                   | -0.315          | 0.200           | 0.515           | -0.280          | 0.188           | 0.468           | -0.215          | 0.166           | 0.381           |                 |                 |                 | -0.223          | 0.160           | 0.383           | -0.619          | 0.132           | 0.751           | -0.691          | 0.068           | 0.759           |     |
| 0.7000                   | -0.232          | 0.152           | 0.384           | -0.230          | 0.126           | 0.356           | -0.168          | 0.118           | 0.286           |                 |                 |                 | -0.103          | 0.111           | 0.214           | -0.668          | 0.080           | 0.748           | -0.709          | 0.007           | 0.716           |     |
| 0.8000                   | -0.281          | 0.081           | 0.362           | -0.292          | 0.074           | 0.366           | -0.346          | 0.061           | 0.407           |                 |                 |                 | -0.392          | 0.052           | 0.246           | -0.720          | 0.069           | 0.706           | -0.774          | -0.069          | 0.654           |     |
| 0.9000                   | -0.344          | 0.007           | 0.351           | -0.369          | 0.017           | 0.386           | -0.400          | -0.004          | 0.396           |                 |                 |                 | -0.383          | -0.018          | 0.365           | -0.682          | -0.115          | 0.567           | -0.743          | -0.182          | 0.561           |     |
| 1.0000                   | -0.423          | -0.072          | 0.351           | -0.460          | -0.045          | 0.415           | -0.331          | -0.078          | 0.253           |                 |                 |                 | -0.074          | -0.097          | -0.022          | -0.614          | -0.265          | 0.349           | -0.771          | -0.358          | 0.413           |     |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT 5.3° SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.7^\circ$  - Continued

| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 1.300      α = -03.81 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.346           | -0.185          | -0.532          | 0.352           | -0.316          | -0.668          | 0.320           | -0.393          | -0.712          |                 |                 |                 | 0.336           | -0.451          | -0.788          | 0.337           | -0.538          | -0.875          | 0.374           | -0.638          |                 | 0.0000 |
| 0.0125                    | 0.304           | -0.213          | -0.517          | 0.287           | -0.319          | -0.606          | 0.256           | -0.358          | -0.614          | 0.238           | -0.432          | -0.670          | 0.250           | -0.407          | -0.657          | 0.268           | -0.491          | -0.759          | 0.288           |                 |                 | 0.0125 |
| 0.0250                    | 0.269           | -0.208          | -0.477          | 0.238           | -0.312          | -0.550          | 0.206           | -0.336          | -0.542          | 0.192           | -0.376          | -0.568          | 0.188           | -0.379          | -0.567          | 0.216           | -0.462          | -0.677          | 0.227           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.220           | -0.103          | -0.323          | 0.186           | -0.264          | -0.451          | 0.146           | -0.329          | -0.476          |                 | -0.344          |                 | 0.136           | -0.373          | -0.509          | 0.160           | -0.457          | -0.617          | 0.178           | -0.561          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.164           | -0.108          | -0.272          | 0.147           | -0.180          | -0.326          | 0.119           | -0.221          | -0.340          | 0.102           | -0.286          | -0.388          | 0.105           | -0.340          | -0.445          | 0.123           | -0.471          | -0.594          | 0.151           | -0.550          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.128           | -0.113          | -0.240          | 0.117           | -0.151          | -0.267          | 0.101           | -0.165          | -0.266          | 0.080           | -0.149          | -0.229          | 0.093           | -0.204          | -0.297          | 0.102           | -0.459          | -0.560          | 0.133           | -0.559          | -0.692          | 0.1000 |
| 0.1500                    | 0.105           | -0.104          | -0.210          | 0.085           | -0.130          | -0.214          | 0.065           | -0.121          | -0.186          | 0.071           | -0.133          | -0.203          | 0.068           | -0.139          | -0.207          | 0.087           | -0.356          | -0.443          | 0.111           | -0.566          | -0.677          | 0.1500 |
| 0.2000                    | 0.072           | -0.074          | -0.146          | 0.066           | -0.093          | -0.158          | 0.061           | -0.071          | -0.132          | 0.050           | -0.098          | -0.148          | 0.053           | -0.138          | -0.191          | 0.067           | -0.217          | -0.284          | 0.095           | -0.557          | -0.652          | 0.2000 |
| 0.3000                    | 0.040           | -0.070          | -0.109          | 0.063           | -0.071          | -0.134          | 0.048           | -0.112          | -0.161          | 0.069           | -0.135          | -0.204          | 0.064           | -0.187          | -0.252          | 0.084           | -0.500          | -0.583          | 0.3000          |                 |                 | 0.3000 |
| 0.4000                    | 0.039           | -0.073          | -0.112          | 0.051           | -0.083          | -0.134          | 0.048           | -0.112          | -0.161          | 0.050           | -0.123          | -0.173          | 0.051           | -0.135          | -0.204          | 0.064           | -0.187          | -0.252          | 0.084           | -0.500          | -0.583          | 0.4000 |
| 0.5000                    | 0.045           | -0.083          | -0.129          | 0.055           | -0.097          | -0.152          | 0.049           | -0.113          | -0.162          | 0.050           | -0.123          | -0.173          | 0.051           | -0.135          | -0.204          | 0.064           | -0.187          | -0.252          | 0.084           | -0.500          | -0.583          | 0.5000 |
| 0.6000                    | 0.051           | -0.097          | -0.148          | 0.034           | -0.112          | -0.146          | 0.027           | -0.125          | -0.152          | 0.047           | -0.142          | -0.189          | 0.098           | -0.175          | -0.274          | 0.088           | -0.207          | -0.295          | 0.081           | -0.193          | -0.274          | 0.6000 |
| 0.7000                    | 0.025           | -0.103          | -0.128          | 0.014           | -0.126          | -0.140          | 0.014           | -0.131          | -0.146          | -0.030          | -0.139          | -0.109          | 0.076           | -0.160          | -0.236          | 0.081           | -0.193          | -0.274          | 0.081           | -0.193          | -0.274          | 0.7000 |
| 0.8000                    | 0.007           | -0.136          | -0.144          | 0.024           | -0.127          | -0.151          | 0.020           | -0.129          | -0.150          | -0.030          | -0.139          | -0.109          | 0.076           | -0.160          | -0.236          | 0.081           | -0.193          | -0.274          | 0.081           | -0.193          | -0.274          | 0.8000 |
| 0.9000                    | -0.007          | -0.120          | -0.113          | -0.008          | -0.122          | -0.114          | -0.037          | -0.124          | -0.087          | -0.082          | -0.126          | -0.046          | 0.068           | -0.160          | -0.227          | 0.065           | -0.186          | -0.252          | 0.065           | -0.186          | -0.252          | 0.9000 |
| 1.0000                    | -0.017          | -0.055          | -0.038          | -0.083          | -0.111          | -0.029          | -0.157          | -0.115          | -0.042          | -0.109          | -0.103          | 0.006           | 0.073           | -0.175          | -0.248          | 0.042           | -0.185          | -0.228          | 1.0000          |                 |                 | 1.0000 |
| M = 1.302      α = 00.10  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.371           | -0.216          | -0.587          | 0.234           | -0.391          | -0.625          | 0.140           | -0.181          | -0.321          |                 |                 |                 | 0.084           | 0.019           | -0.065          | 0.001           | 0.073           | 0.073           | -0.071          | -0.057          |                 | 0.0000 |
| 0.0125                    | 0.303           | -0.230          | -0.533          | 0.225           | -0.338          | -0.563          | 0.110           | -0.165          | -0.275          | 0.034           | -0.039          | -0.073          | 0.031           | 0.000           | -0.031          | 0.022           | 0.053           | -0.083          |                 |                 |                 | 0.0125 |
| 0.0250                    | 0.249           | -0.230          | -0.479          | 0.200           | -0.300          | -0.499          | 0.083           | -0.152          | -0.235          | 0.010           | -0.058          | -0.068          | -0.006          | -0.014          | -0.009          | -0.054          | -0.016          | 0.038           | -0.095          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.180           | -0.189          | -0.369          | 0.103           | -0.265          | -0.368          | 0.034           | -0.139          | -0.173          |                 | -0.054          |                 | -0.033          | -0.035          | -0.002          | -0.075          | -0.053          | 0.022           | -0.119          | -0.082          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.140           | -0.144          | -0.284          | 0.064           | -0.198          | -0.261          | 0.011           | -0.079          | -0.091          | -0.022          | -0.045          | -0.023          | -0.047          | -0.033          | 0.013           | -0.094          | -0.070          | 0.024           | -0.126          | -0.082          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.064           | -0.121          | -0.185          | 0.050           | -0.104          | -0.154          | -0.012          | -0.045          | -0.033          | -0.040          | -0.036          | 0.004           | -0.058          | -0.042          | 0.015           | -0.103          | -0.076          | 0.027           | -0.126          | -0.084          | 0.042           | 0.1000 |
| 0.1500                    | 0.022           | -0.065          | -0.087          | -0.003          | -0.068          | -0.064          | -0.032          | -0.045          | -0.013          | -0.038          | -0.046          | -0.008          | -0.060          | -0.052          | 0.008           | -0.103          | -0.087          | 0.016           | -0.125          | -0.088          | 0.036           | 0.1500 |
| 0.2000                    | -0.001          | -0.017          | -0.015          | -0.027          | -0.012          | -0.027          | 0.006           | -0.032          | 0.003           |                 | -0.048          |                 | -0.061          | -0.048          | 0.013           | -0.099          | -0.074          | 0.025           | -0.119          | -0.098          | 0.021           | 0.2000 |
| 0.3000                    | -0.033          | -0.003          | 0.030           | -0.042          | -0.024          | -0.047          | -0.044          | -0.044          | -0.009          |                 |                 |                 | -0.054          | -0.058          | -0.003          | -0.092          | -0.083          | 0.008           | -0.104          | -0.112          | -0.008          | 0.3000 |
| 0.4000                    | -0.040          | 0.004           | 0.044           | -0.043          | -0.032          | -0.011          | -0.046          | -0.054          | -0.009          |                 |                 |                 | -0.049          | -0.060          | -0.011          | -0.062          | -0.097          | 0.034           | -0.100          | -0.122          | -0.022          | 0.4000 |
| 0.5000                    | -0.037          | -0.015          | 0.022           | -0.036          | -0.034          | 0.001           | -0.029          | -0.053          | -0.025          |                 |                 |                 | -0.049          | -0.079          | 0.030           | -0.043          | -0.097          | -0.054          | -0.088          | -0.126          | -0.038          | 0.5000 |
| 0.6000                    | -0.032          | -0.032          |                 | -0.030          | -0.054          | -0.024          | -0.046          | -0.074          | -0.017          |                 |                 |                 | -0.043          | -0.082          | -0.039          | 0.063           | -0.103          | -0.166          | -0.077          | -0.124          | -0.047          | 0.6000 |
| 0.7000                    | -0.041          | -0.048          |                 | -0.050          | -0.067          | -0.024          | -0.062          | -0.078          | -0.017          |                 |                 |                 | -0.038          | -0.088          | -0.049          | 0.051           | -0.109          | -0.159          | -0.064          | -0.120          | -0.056          | 0.7000 |
| 0.8000                    | -0.075          | -0.071          | 0.004           | -0.047          | -0.071          | -0.024          | -0.062          | -0.078          | -0.017          |                 |                 |                 | -0.124          | -0.089          | 0.035           | 0.009           | -0.098          | -0.107          | -0.019          | -0.123          | -0.104          | 0.8000 |
| 0.9000                    | -0.082          | -0.075          | 0.007           | -0.099          | -0.075          | 0.024           | -0.131          | -0.092          | -0.040          |                 |                 |                 | -0.177          | -0.093          | 0.084           | 0.015           | -0.103          | -0.118          | 0.001           | -0.113          | -0.113          | 0.9000 |
| 1.0000                    | -0.061          | -0.061          |                 | -0.207          | -0.080          | 0.127           | -0.269          | -0.116          | 0.153           |                 |                 |                 | -0.196          | -0.098          | 0.098           | 0.069           | -0.124          | -0.193          | -0.004          | -0.089          | -0.085          | 1.0000 |
| M = 1.302      α = 04.01  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.481           | -0.541          | -1.022          | 0.313           | -0.529          | -0.843          | -0.013          | -0.122          | -0.109          |                 |                 |                 | -0.363          | 0.294           | 0.657           | -0.560          | 0.318           | 0.878           | -0.623          | 0.236           |                 | 0.0000 |
| 0.0125                    | 0.380           | -0.477          | -0.857          | 0.282           | -0.555          | -0.837          | -0.039          | -0.087          | -0.049          | -0.251          | 0.138           | 0.389           | -0.353          | 0.230           | 0.584           | -0.510          | 0.257           | 0.767           | -0.585          |                 |                 | 0.0125 |
| 0.0250                    | 0.305           | -0.419          | -0.724          | 0.248           | -0.515          | -0.763          | -0.063          | -0.059          | -0.004          | -0.217          | 0.107           | 0.324           | -0.338          | 0.183           | 0.520           | -0.477          | 0.208           | 0.686           | -0.557          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.236           | -0.318          | -0.554          | 0.171           | -0.242          | -0.413          | -0.105          | -0.021          | 0.084           |                 | 0.085           |                 | -0.286          | 0.136           | 0.422           | -0.462          | 0.151           | 0.613           | -0.537          |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.175           | -0.269          | -0.444          | 0.069           | -0.058          | -0.126          | -0.137          | 0.015           | 0.152           | -0.158          | 0.074           | 0.232           | -0.186          | 0.118           | 0.304           | -0.467          | 0.117           | 0.583           | -0.536          |                 |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.150           | -0.205          | -0.355          | 0.014           | -0.041          | -0.055          | -0.149          | 0.041           | 0.190           | -0.167          | 0.080           | 0.248           | -0.181          | 0.099           | 0.280           | -0.463          | 0.100           | 0.563           | -0.536          | 0.124           | 0.660           | 0.1000 |
| 0.1500                    | 0.070           | -0.107          | -0.177          | -0.064          | -0.111          | -0.053          | -0.169          | 0.060           | 0.229           | -0.164          | 0.071           | 0.235           | -0.175          | 0.080           | 0.255           | -0.427          | 0.077           | 0.504           | -0.545          | 0.100           | 0.645           | 0.1500 |
| 0.2000                    | -0.058          | -0.033          | 0.025           | -0.110          | -0.061          | -0.165          | -0.101          | -0.266          | -0.163          |                 |                 |                 | -0.165          | 0.076           | 0.241           | -0.322          | 0.069           | 0.391           | -0.566          | 0.075           | 0.641           | 0.2000 |
| 0.3000                    | -0.118          | 0.052           | 0.169           | -0.138          | 0.054           | 0.192           | -0.162          | 0.051           | 0.213           |                 |                 |                 | -0.147          | 0.043           | 0.190           | -0.210          | 0.029           | 0.239           | -0.519          | 0.044           | 0.563           | 0.3000 |
| 0.4000                    | -0.126          | 0.055           | 0.181           | -0.130          | 0.049           | 0.179           | -0.148          | 0.029           | 0.177           |                 |                 |                 | -0.134          | 0.036           | 0.171           | -0.186          | 0.013           | 0.199           | -0.469          | 0.029           | 0.498           | 0.4000 |
| 0.5000                    | -0.123          | 0.031           | 0.154           | -0.110          | 0.010           | 0.120           | -0.116          | 0.009           | 0.126           |                 |                 |                 | -0.129          | -0.002          | 0.128           | -0.122          | 0.006           | 0.129           | -0.356          | 0.020           | 0.376           | 0.5000 |
| 0.6000                    | -0.096          | 0.008           | 0.104           | -0.101          | -0.013          | 0.089           | -0.123          | -0.016          | 0.107           |                 |                 |                 | -0.117          | -0.008          | 0.110           | -0.043          | -0.014          | 0.029           | -0.242          | 0.029           | 0.346           | 0.6000 |
| 0.7000                    | -0.100          | -0.005          | 0.095           | -0.111          | -0.022          | 0.089           | -0.127          | -0.030          | 0.097           |                 |                 |                 | -0.108          | -0.024          | 0.084           | -0.024          | -0.009          | 0.014           | -0.185          | 0.003           | 0.299           | 0.7000 |
| 0.8000                    | -0.132          | -0.028          | 0.104           | -0.114          | -0.030          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.7^\circ$  - Continued

| x/c                      | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----|
|                          | C <sub>Pu</sub> | C <sub>Pl</sub> | ΔC <sub>p</sub> | C <sub>Pu</sub> | C <sub>Pl</sub> | ΔC <sub>p</sub> | C <sub>Pu</sub> | C <sub>Pl</sub> | ΔC <sub>p</sub> | C <sub>Pu</sub> | C <sub>Pl</sub> | ΔC <sub>p</sub> | C <sub>Pu</sub> | C <sub>Pl</sub> | ΔC <sub>p</sub> | C <sub>Pu</sub> | C <sub>Pl</sub> | ΔC <sub>p</sub> | C <sub>Pu</sub> | C <sub>Pl</sub> | ΔC <sub>p</sub> |     |
| M = 1.301      α = 08.06 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | 0.014           | 0.069           | 0.055           | -0.094          | 0.149           | 0.243           | -0.335          | 0.316           | 0.650           | -0.417          | 0.368           | 0.784           | -0.483          | 0.351           | 0.834           | -0.499          | 0.334           |                 | 0.0000          |                 |                 |     |
| 0.0125                   | 0.026           | 0.067           | 0.041           | -0.094          | 0.159           | 0.253           | -0.466          | 0.297           | 0.764           | -0.444          | 0.328           | 0.773           | -0.427          | 0.330           | 0.757           | -0.477          | 0.339           | 0.816           | -0.503          |                 | 0.0125          |     |
| 0.0250                   | 0.018           | 0.070           | 0.052           | -0.109          | 0.166           | 0.274           | -0.490          | 0.280           | 0.770           | -0.440          | 0.300           | 0.741           | -0.434          | 0.299           | 0.733           | -0.474          | 0.324           | 0.798           | -0.505          |                 | 0.0250          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420          |     |
| 0.0500                   | -0.055          | 0.095           | 0.150           | -0.181          | 0.172           | 0.353           | -0.217          | 0.248           | 0.465           |                 | 0.250           |                 | -0.439          | 0.255           | 0.694           | -0.475          | 0.286           | 0.761           | -0.507          | 0.313           | 0.0420          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0500          |     |
| 0.0750                   | -0.069          | 0.098           | 0.167           | -0.188          | 0.173           | 0.361           | -0.184          | 0.223           | 0.407           | -0.429          | 0.213           | 0.642           | -0.424          | 0.235           | 0.659           | -0.478          | 0.255           | 0.733           | -0.511          |                 | 0.0640          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0750          |     |
| 0.1000                   | -0.154          | 0.104           | 0.259           | -0.190          | 0.172           | 0.362           | -0.184          | 0.201           | 0.385           | -0.433          | 0.202           | 0.635           | -0.413          | 0.211           | 0.624           | -0.479          | 0.237           | 0.715           | -0.515          | 0.268           | 0.784           |     |
| 0.1500                   | -0.181          | 0.122           | 0.303           | -0.210          | 0.167           | 0.377           | -0.188          | 0.170           | 0.358           | -0.381          | 0.170           | 0.551           | -0.401          | 0.186           | 0.587           | -0.487          | 0.200           | 0.687           | -0.522          | 0.246           | 0.769           |     |
| 0.2000                   | -0.200          | 0.138           | 0.338           | -0.205          | 0.157           | 0.362           | -0.195          | 0.185           | 0.379           | -0.287          |                 |                 | -0.394          | 0.164           | 0.558           | -0.484          | 0.182           | 0.667           | -0.529          | 0.223           | 0.752           |     |
| 0.3000                   | -0.214          | 0.131           | 0.344           | -0.202          | 0.131           | 0.333           | -0.192          | 0.124           | 0.316           |                 |                 |                 | -0.344          | 0.141           | 0.484           | -0.491          | 0.146           | 0.636           | -0.521          | 0.196           | 0.718           |     |
| 0.4000                   | -0.217          | 0.127           | 0.344           | -0.201          | 0.114           | 0.315           | -0.176          | 0.110           | 0.286           |                 |                 |                 | -0.244          | 0.116           | 0.360           | -0.474          | 0.129           | 0.603           | -0.520          | 0.178           | 0.698           |     |
| 0.5000                   | -0.199          | 0.111           | 0.310           | -0.190          | 0.099           | 0.288           | -0.184          | 0.088           | 0.273           |                 |                 |                 | -0.188          | 0.098           | 0.285           | -0.510          | 0.116           | 0.626           | -0.508          | 0.164           | 0.672           |     |
| 0.6000                   | -0.181          | 0.092           | 0.273           | -0.192          | 0.082           | 0.274           | -0.193          | 0.081           | 0.273           |                 |                 |                 | -0.170          | 0.088           | 0.258           | -0.498          | 0.113           | 0.611           | -0.502          | 0.144           | 0.646           |     |
| 0.7000                   | -0.189          | 0.081           | 0.270           | -0.199          | 0.076           | 0.275           | -0.194          | 0.086           | 0.281           |                 |                 |                 | -0.029          | 0.086           | 0.115           | -0.464          | 0.117           | 0.581           | -0.498          | 0.132           | 0.630           |     |
| 0.8000                   | -0.194          | 0.078           | 0.272           | -0.192          | 0.074           | 0.266           | -0.132          | 0.083           | 0.216           |                 |                 |                 | -0.204          | 0.106           | 0.310           | -0.449          | 0.105           | 0.554           | -0.490          | 0.114           | 0.604           |     |
| 0.9000                   | -0.164          | 0.071           | 0.235           | -0.173          | 0.079           | 0.252           | -0.208          | 0.078           | 0.286           |                 |                 |                 | -0.279          | 0.084           | 0.363           | -0.314          | 0.071           | 0.386           | -0.428          | 0.116           | 0.544           |     |
| 1.0000                   | -0.099          | 0.060           | 0.159           | -0.143          | 0.089           | 0.232           | -0.422          | 0.071           | 0.493           |                 |                 |                 | -0.254          | 0.019           | 0.273           | -0.061          | 0.015           | 0.076           | -0.312          | 0.137           | 0.449           |     |
| M = 1.300      α = 12.06 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.524          | 0.319           | 0.842           | -0.519          | 0.310           | 0.829           | -0.556          | 0.356           | 0.913           |                 | 0.366           | 0.937           | -0.559          | 0.375           | 0.934           | -0.558          | 0.355           | 0.914           | -0.533          | 0.319           |                 |     |
| 0.0125                   | -0.376          | 0.307           | 0.683           | -0.519          | 0.314           | 0.833           | -0.563          | 0.356           | 0.919           | -0.570          | 0.366           | 0.937           | -0.555          | 0.391           | 0.946           | -0.551          | 0.389           | 0.940           | -0.542          |                 | 0.0000          |     |
| 0.0250                   | -0.282          | 0.295           | 0.577           | -0.529          | 0.313           | 0.842           | -0.567          | 0.351           | 0.918           | -0.575          | 0.371           | 0.946           | -0.553          | 0.395           | 0.948           | -0.548          | 0.406           | 0.954           | -0.547          |                 | 0.0125          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0250          |     |
| 0.0500                   | -0.253          | 0.271           | 0.524           | -0.574          | 0.298           | 0.872           | -0.571          | 0.322           | 0.892           |                 | 0.347           |                 | -0.554          | 0.370           | 0.923           | -0.551          | 0.393           | 0.944           | -0.547          |                 | 0.0420          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0500          |     |
| 0.0750                   | -0.230          | 0.247           | 0.476           | -0.340          | 0.288           | 0.628           | -0.597          | 0.301           | 0.898           | -0.586          | 0.322           | 0.908           | -0.561          | 0.351           | 0.912           | -0.554          | 0.372           | 0.926           | -0.549          |                 | 0.0640          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0750          |     |
| 0.1000                   | -0.243          | 0.240           | 0.483           | -0.239          | 0.277           | 0.516           | -0.607          | 0.291           | 0.898           | -0.610          | 0.318           | 0.929           | -0.573          | 0.329           | 0.902           | -0.554          | 0.356           | 0.909           | -0.552          | 0.381           | 0.933           |     |
| 0.1500                   | -0.250          | 0.241           | 0.491           | -0.232          | 0.262           | 0.494           | -0.480          | 0.277           | 0.757           | -0.629          | 0.283           | 0.911           | -0.605          | 0.298           | 0.903           | -0.560          | 0.324           | 0.884           | -0.558          | 0.362           | 0.920           |     |
| 0.2000                   | -0.239          | 0.242           | 0.482           | -0.239          | 0.250           | 0.489           | -0.265          | 0.285           | 0.550           | -0.638          |                 |                 | -0.622          | 0.277           | 0.900           | -0.557          | 0.304           | 0.861           | -0.571          | 0.342           | 0.913           |     |
| 0.3000                   | -0.243          | 0.230           | 0.474           | -0.254          | 0.257           | 0.512           | -0.242          | 0.229           | 0.471           |                 |                 |                 | -0.640          | 0.240           | 0.880           | -0.578          | 0.277           | 0.855           | -0.582          | 0.307           | 0.889           |     |
| 0.4000                   | -0.247          | 0.214           | 0.461           | -0.254          | 0.218           | 0.472           | -0.239          | 0.209           | 0.449           |                 |                 |                 | -0.545          | 0.226           | 0.770           | -0.592          | 0.272           | 0.864           | -0.611          | 0.283           | 0.894           |     |
| 0.5000                   | -0.244          | 0.197           | 0.441           | -0.238          | 0.198           | 0.436           | -0.230          | 0.192           | 0.422           |                 |                 |                 | -0.329          | 0.210           | 0.539           | -0.634          | 0.255           | 0.889           | -0.631          | 0.262           | 0.893           |     |
| 0.6000                   | -0.240          | 0.197           | 0.441           | -0.238          | 0.198           | 0.436           | -0.230          | 0.192           | 0.422           |                 |                 |                 | -0.244          | 0.225           | 0.469           | -0.660          | 0.224           | 0.883           | -0.640          | 0.251           | 0.892           |     |
| 0.7000                   | -0.224          | 0.191           | 0.414           | -0.230          | 0.190           | 0.421           | -0.236          | 0.198           | 0.434           |                 |                 |                 | -0.218          | 0.200           | 0.418           | -0.641          | 0.201           | 0.842           | -0.633          | 0.249           | 0.881           |     |
| 0.8000                   | -0.234          | 0.209           | 0.443           | -0.238          | 0.206           | 0.445           | -0.245          | 0.212           | 0.457           |                 |                 |                 | -0.217          | 0.165           | 0.381           | -0.651          | 0.183           | 0.834           | -0.533          | 0.231           | 0.766           |     |
| 0.9000                   | -0.258          | 0.166           | 0.423           | -0.249          | 0.178           | 0.426           | -0.217          | 0.159           | 0.376           |                 |                 |                 | -0.298          | 0.157           | 0.456           | -0.637          | 0.173           | 0.810           | -0.485          | 0.221           | 0.704           |     |
| 1.0000                   | -0.179          | 0.151           | 0.331           | -0.192          | 0.160           | 0.352           | -0.230          | 0.149           | 0.379           |                 |                 |                 | -0.463          | 0.179           | 0.642           | -0.599          | 0.171           | 0.770           | -0.488          | 0.220           | 0.708           |     |
| 1.0000                   | 0.001           | 0.166           | 0.164           | -0.067          | 0.153           | 0.221           | -0.285          | 0.182           | 0.467           |                 |                 |                 | -0.463          | 0.179           | 0.642           | -0.599          | 0.171           | 0.770           | -0.488          | 0.220           | 0.708           |     |
| M = 1.299      α = 16.07 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |     |
| 0.0000                   | -0.579          | 0.418           | 0.997           | -0.637          | 0.385           | 1.022           | -0.623          | 0.360           | 0.983           |                 | 0.400           | 1.019           | -0.620          | 0.369           | 0.989           | -0.606          | 0.309           | 0.915           | -0.528          | 0.343           |                 |     |
| 0.0125                   | -0.595          | 0.421           | 1.015           | -0.627          | 0.404           | 1.031           | -0.625          | 0.410           | 1.035           | -0.619          | 0.400           | 1.019           | -0.615          | 0.419           | 1.034           | -0.596          | 0.397           | 0.993           | -0.525          |                 | 0.0000          |     |
| 0.0250                   | -0.604          | 0.421           | 1.025           | -0.628          | 0.414           | 1.042           | -0.627          | 0.438           | 1.065           | -0.623          | 0.446           | 1.068           | -0.612          | 0.449           | 1.061           | -0.591          | 0.452           | 1.043           | -0.522          |                 | 0.0125          |     |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0250          |     |
| 0.0500                   | -0.604          | 0.417           | 1.021           | -0.663          | 0.406           | 1.069           | -0.629          | 0.429           | 1.058           |                 | 0.443           |                 | -0.612          | 0.447           | 1.059           | -0.596          | 0.465           | 1.061           | -0.513          | 0.443           | 0.0500          |     |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640          |     |
| 0.0750                   | -0.429          | 0.391           | 0.820           | -0.655          | 0.399           | 1.055           | -0.658          | 0.409           | 1.067           | -0.628          | 0.419           | 1.047           | -0.615          | 0.442           | 1.056           | -0.600          | 0.459           | 1.059           | -0.508          |                 | 0.0750          |     |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810          |     |
| 0.1000                   | -0.334          | 0.368           | 0.702           | -0.648          | 0.383           | 1.031           | -0.683          | 0.402           | 1.086           | -0.653          | 0.407           | 1.059           | -0.616          | 0.427           | 1.042           | -0.601          | 0.445           | 1.047           | -0.505          | 0.449           | 0.955           |     |
| 0.1500                   | -0.322          | 0.365           | 0.687           | -0.574          | 0.364           | 0.938           | -0.671          | 0.372           | 1.042           | -0.683          | 0.382           | 1.065           | -0.646          | 0.402           | 1.048           | -0.610          | 0.422           | 1.032           | -0.501          | 0.446           | 0.947           |     |
| 0.2000                   | -0.310          | 0.346           | 0.656           | -0.455          | 0.360           | 0.814           | -0.693          | 0.383           | 1.036           | -0.693          |                 |                 | -0.670          | 0.386           | 1.056           | -0.607          | 0.401           | 1.008           | -0.502          | 0.436           | 0.938           |     |
| 0.3000                   | -0.310          | 0.328           | 0.638           | -0.364          | 0.336           | 0.701           | -0.513          | 0.339           | 0.852           |                 |                 |                 | -0.684          | 0.377           | 1.061           | -0.618          | 0.368           | 0.986           | -0.514          | 0.416           | 0.930           |     |
| 0.4000                   | -0.299          | 0.326           | 0.624           | -0.320          | 0.330           | 0.649           | -0.388          | 0.345           | 0.736           |                 |                 |                 | -0.689          | 0.332           | 1.022           | -0.604          | 0.344           | 0.948           | -0.540          | 0.390           | 0.930           |     |
| 0.5000                   | -0.303          | 0.318           | 0.621           | -0.314          | 0.306           | 0.620           | -0.345          | 0.298           | 0.643           |                 |                 |                 | -0.646          | 0.305           | 0.951           | -0.587          | 0.340           | 0.928           | -0.548          | 0.377           | 0.924           |     |
| 0.6000                   | -0.292          | 0.286           | 0.578           | -0.307          | 0.277           | 0.585           | -0.325          | 0.281           | 0.606           |                 |                 |                 | -0.590          | 0.295           | 0.885           | -0.592          | 0.327           | 0.919           | -0.550          | 0.356           | 0.906           |     |
| 0.7000                   | -0.289          | 0.282           | 0.570           | -0.312          | 0.273           | 0.585           | -0.325          | 0.281           | 0.606           |                 |                 |                 | -0.525          | 0.290           | 0.815           | -0.584          | 0.314           | 0.845           | -0.545          | 0.346           | 0.901           |     |
| 0.8000                   | -0.321          | 0.275           | 0.596           | -0.318          | 0.269           | 0.587           | -0.327          | 0.273           | 0.600           |                 |                 |                 | -0.221          | 0.280           | 0.501           | -0.593          | 0.296           | 0.888           | -0.555          | 0.333           | 0.886           |     |
| 0.9000                   | -0.304          | 0.262           | 0.566           | -0.215          | 0.266           | 0.481           | -0.239          | 0.262           | 0.501           |                 |                 |                 | -0.355          | 0.272           | 0.627           | -0.591          | 0.288           | 0.879           | -0.557          | 0.336           | 0.893           |     |
| 1.0000                   | -0.238          | 0.241           | 0.479           | -0.002          | 0.265           | 0.267           | -0.060          | 0.246           | 0.307           |                 |                 |                 | -0.             |                 |                 |                 |                 |                 |                 |                 |                 |     |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.7^\circ$  - Continued

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| x/c                       | 2y/b = 0.200    |                 |                 | 2y/b = 0.250    |                 |                 | 2y/b = 0.300    |                 |                 | 2y/b = 0.350    |                 |                 | 2y/b = 0.400    |                 |                 | 2y/b = 0.600    |                 |                 | 2y/b = 0.800    |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 2.227      α = -03.56 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.381           | -0.040          | -0.421          | 0.304           | -0.017          | -0.321          | 0.298           | -0.016          | -0.314          |                 |                 |                 | 0.302           | 0.014           | -0.289          | 0.293           | 0.015           | -0.277          | 0.312           | -0.074          |                 | 0.0000 |
| 0.0125                    | 0.276           | -0.053          | -0.329          | 0.258           | -0.043          | -0.301          | 0.247           | -0.034          | -0.281          | 0.238           | -0.019          | -0.257          | 0.241           | -0.007          | -0.248          | 0.245           | 0.003           | -0.241          | 0.249           |                 |                 | 0.0125 |
| 0.0250                    | 0.203           | -0.061          | -0.263          | 0.222           | -0.061          | -0.282          | 0.206           | -0.048          | -0.253          | 0.198           | -0.032          | -0.230          | 0.197           | -0.018          | -0.214          | 0.206           | -0.009          | -0.215          | 0.204           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.152           | -0.057          | -0.209          | 0.174           | -0.072          | -0.247          | 0.152           | -0.064          | -0.215          |                 | -0.051          |                 | 0.157           | -0.008          | -0.165          | 0.159           | -0.032          | -0.192          | 0.164           | -0.038          |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.146           | -0.060          | -0.206          | 0.140           | -0.071          | -0.211          | 0.132           | -0.074          | -0.206          | 0.127           | -0.063          | -0.190          | 0.120           | -0.041          | -0.161          | 0.132           | -0.041          | -0.174          | 0.141           | -0.038          |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.138           | -0.058          | -0.197          | 0.123           | -0.068          | -0.191          | 0.101           | -0.075          | -0.177          | 0.096           | -0.066          | -0.161          | 0.095           | -0.053          | -0.147          | 0.111           | -0.049          | -0.159          | 0.128           | -0.048          | -0.176          | 0.1000 |
| 0.1500                    | 0.107           | -0.043          | -0.151          | 0.086           | -0.067          | -0.153          | 0.079           | -0.072          | -0.151          | 0.073           | -0.077          | -0.150          | 0.073           | -0.060          | -0.133          | 0.086           | -0.060          | -0.146          | 0.109           | -0.051          | -0.161          | 0.1500 |
| 0.2000                    | 0.086           | -0.033          | -0.118          | 0.072           | -0.066          | -0.138          | 0.071           | -0.038          | -0.033          | 0.066           | -0.065          | -0.131          | 0.078           | -0.070          | -0.148          | 0.094           | -0.056          | -0.150          | 0.094           | -0.056          | -0.150          | 0.2000 |
| 0.3000                    | 0.061           | -0.033          | -0.095          | 0.058           | -0.037          | -0.095          | 0.048           | -0.072          | -0.120          |                 |                 |                 | 0.052           | -0.078          | -0.130          | 0.058           | -0.076          | -0.134          | 0.085           | -0.064          | -0.149          | 0.3000 |
| 0.4000                    | 0.030           | -0.033          | -0.064          | 0.033           | -0.038          | -0.071          | 0.031           | -0.054          | -0.085          |                 |                 |                 | 0.041           | -0.076          | -0.117          | 0.056           | -0.083          | -0.139          | 0.059           | -0.071          | -0.131          | 0.4000 |
| 0.5000                    | 0.027           | -0.031          | -0.058          | 0.023           | -0.039          | -0.062          | 0.024           | -0.050          | -0.074          |                 |                 |                 | 0.027           | -0.066          | -0.093          | 0.044           | -0.087          | -0.131          | 0.051           | -0.077          | -0.128          | 0.5000 |
| 0.6000                    | 0.038           | -0.036          | -0.074          | 0.016           | -0.047          | -0.062          | 0.015           | -0.053          | -0.068          |                 |                 |                 | 0.021           | -0.061          | -0.082          | 0.063           | -0.095          | -0.158          | 0.043           | -0.089          | -0.132          | 0.6000 |
| 0.7000                    | 0.044           | -0.041          | -0.086          | 0.011           | -0.046          | -0.058          | 0.011           | -0.053          | -0.064          |                 |                 |                 | 0.028           | -0.059          | -0.087          | 0.080           | -0.094          | -0.174          | 0.039           | -0.089          | -0.128          | 0.7000 |
| 0.8000                    | 0.010           | -0.055          | -0.065          | 0.009           | -0.053          | -0.061          | 0.006           | -0.056          | -0.062          |                 |                 |                 | 0.006           | -0.057          | -0.063          | 0.065           | -0.103          | -0.167          | 0.035           | -0.092          | -0.127          | 0.8000 |
| 0.9000                    | 0.007           | -0.061          | -0.068          | 0.004           | -0.053          | -0.058          | 0.004           | -0.059          | -0.063          |                 |                 |                 | -0.021          | -0.053          | -0.032          | 0.056           | -0.103          | -0.159          | 0.030           | -0.092          | -0.122          | 0.9000 |
| 1.0000                    | 0.034           | -0.061          | -0.095          | -0.002          | -0.048          | -0.046          | 0.004           | -0.061          | -0.065          |                 |                 |                 | -0.055          | -0.048          | 0.007           | 0.055           | -0.094          | -0.149          | 0.024           | -0.089          | -0.113          | 1.0000 |
| M = 2.231      α = 00.40  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.381           | -0.038          | -0.420          | 0.323           | -0.040          | -0.363          | 0.229           | -0.103          | -0.332          |                 |                 |                 | 0.119           | 0.189           | 0.070           | 0.116           | 0.211           | 0.096           | 0.123           | 0.147           |                 | 0.0000 |
| 0.0125                    | 0.251           | -0.047          | -0.298          | 0.246           | -0.063          | -0.309          | 0.177           | -0.059          | -0.236          | 0.079           | 0.128           | 0.049           | 0.089           | 0.145           | 0.056           | 0.093           | 0.160           | 0.067           | 0.090           |                 |                 | 0.0125 |
| 0.0250                    | 0.169           | -0.051          | -0.220          | 0.190           | -0.079          | -0.269          | 0.134           | -0.028          | -0.162          | 0.060           | 0.088           | 0.028           | 0.066           | 0.108           | 0.042           | 0.075           | 0.121           | 0.046           | 0.066           |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.148           | -0.048          | -0.196          | 0.142           | -0.092          | -0.234          | 0.080           | -0.004          | -0.084          |                 | 0.052           |                 | 0.041           | 0.057           | 0.016           | 0.051           | 0.080           | 0.029           | 0.046           |                 |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.122           | -0.052          | -0.174          | 0.107           | -0.084          | -0.191          | 0.059           | -0.003          | -0.061          | 0.032           | 0.027           | -0.005          | 0.026           | 0.035           | 0.009           | 0.029           | 0.056           | 0.026           | 0.029           | 0.071           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.100           | -0.057          | -0.156          | 0.081           | -0.057          | -0.139          | 0.042           | -0.003          | -0.045          | 0.020           | 0.011           | -0.009          | 0.012           | 0.018           | 0.005           | 0.013           | 0.043           | 0.030           | 0.021           | 0.058           | 0.037           | 0.1000 |
| 0.1500                    | 0.071           | -0.056          | -0.128          | 0.034           | -0.045          | -0.079          | 0.015           | -0.028          | -0.043          | 0.000           | -0.016          | -0.016          | -0.001          | -0.002          | -0.002          | -0.008          | 0.022           | 0.030           | 0.007           | 0.045           | 0.039           | 0.1500 |
| 0.2000                    | 0.047           | -0.037          | -0.084          | 0.026           | -0.036          | -0.062          | 0.011           | -0.082          | -0.071          | -0.004          |                 |                 | -0.008          | -0.018          | -0.009          | -0.008          | 0.008           | 0.016           | -0.011          | 0.032           | 0.043           | 0.2000 |
| 0.3000                    | 0.017           | -0.003          | -0.020          | 0.005           | -0.008          | -0.004          | 0.004           | -0.008          | -0.010          | -0.002          |                 |                 | -0.013          | -0.026          | -0.013          | -0.021          | -0.014          | 0.006           | -0.007          | 0.015           | 0.022           | 0.3000 |
| 0.4000                    | -0.024          | 0.014           | 0.038           | -0.018          | 0.001           | 0.019           | -0.021          | -0.013          | 0.009           |                 |                 |                 | -0.021          | -0.011          | 0.010           | -0.023          | -0.023          |                 | -0.028          | -0.001          | 0.027           | 0.4000 |
| 0.5000                    | -0.027          | 0.009           | 0.036           | -0.027          | -0.007          | 0.019           | -0.028          | -0.017          | 0.011           |                 |                 |                 | -0.029          | -0.016          | 0.012           | -0.032          | -0.033          | -0.001          | -0.037          | -0.009          | 0.028           | 0.5000 |
| 0.6000                    | -0.007          | -0.002          | 0.006           | -0.031          | -0.014          | 0.017           | -0.034          | -0.026          | 0.009           |                 |                 |                 | -0.034          | -0.023          | 0.011           | -0.020          | -0.038          | -0.018          | -0.042          | -0.024          | 0.018           | 0.6000 |
| 0.7000                    | -0.001          | -0.008          | -0.007          | -0.038          | -0.021          | 0.017           | -0.035          | -0.022          | 0.014           |                 |                 |                 | -0.027          | -0.024          | 0.003           | 0.021           | -0.029          | -0.050          | -0.045          | -0.031          | 0.014           | 0.7000 |
| 0.8000                    | -0.029          | -0.035          | -0.005          | -0.039          | -0.027          | 0.012           | -0.037          | -0.029          | 0.009           |                 |                 |                 | -0.051          | -0.027          | 0.023           | 0.020           | -0.032          | -0.052          | -0.047          | -0.036          | 0.010           | 0.8000 |
| 0.9000                    | -0.033          | -0.033          | 0.000           | -0.035          | -0.033          | 0.002           | -0.039          | -0.034          | 0.005           |                 |                 |                 | -0.032          | -0.032          | 0.040           | 0.017           | -0.035          | -0.052          | -0.050          | -0.036          | 0.013           | 0.9000 |
| 1.0000                    | -0.013          | -0.003          | 0.010           | -0.027          | -0.041          | -0.014          | -0.041          | -0.039          | 0.002           |                 |                 |                 | -0.093          | -0.039          | 0.054           | 0.012           | -0.038          | -0.050          | -0.054          | -0.031          | 0.023           | 1.0000 |
| M = 2.231      α = 04.26  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.331           | -0.077          | -0.408          | 0.041           | -0.094          | -0.135          | 0.046           | 0.034           | -0.011          | -0.064          | 0.315           | 0.379           | -0.023          | 0.322           | 0.345           | -0.022          | 0.255           |                 |                 |                 |                 | 0.0000 |
| 0.0125                    | 0.224           | -0.069          | -0.293          | 0.104           | -0.116          | -0.221          | 0.021           | 0.031           | 0.011           | -0.086          | 0.247           | 0.333           | -0.067          | 0.259           | 0.325           | -0.038          | 0.273           | 0.311           | -0.050          |                 |                 | 0.0125 |
| 0.0250                    | 0.151           | -0.063          | -0.214          | 0.130           | -0.130          | -0.260          | 0.001           | 0.032           | 0.031           | -0.083          | 0.198           | 0.281           | -0.069          | 0.213           | 0.281           | -0.049          | 0.234           | 0.283           | -0.068          |                 |                 | 0.0250 |
| 0.0420                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0420 |
| 0.0500                    | 0.109           | -0.058          | -0.168          | 0.068           | -0.132          | -0.200          | -0.020          | 0.043           | 0.063           |                 | 0.150           |                 | -0.071          | 0.152           | 0.223           | -0.056          | 0.186           | 0.243           | -0.068          | 0.208           |                 | 0.0500 |
| 0.0640                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0640 |
| 0.0750                    | 0.086           | -0.046          | -0.132          | 0.034           | -0.059          | -0.093          | -0.025          | 0.046           | 0.071           | -0.068          | 0.118           | 0.185           | -0.074          | 0.128           | 0.202           | -0.067          | 0.156           | 0.223           | -0.068          | 0.189           |                 | 0.0750 |
| 0.0810                    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.0810 |
| 0.1000                    | 0.061           | -0.042          | -0.103          | 0.021           | -0.020          | -0.030          | 0.050           | 0.080           | -0.066          | 0.100           | 0.165           | -0.076          | 0.110           | 0.186           | -0.076          | 0.140           | 0.216           | -0.075          | 0.167           | 0.243           | 0.1000          |        |
| 0.1500                    | 0.020           | -0.040          | -0.060          | -0.021          | 0.020           | 0.041           | -0.043          | 0.043           | 0.086           | -0.060          | 0.072           | 0.132           | -0.074          | 0.079           | 0.154           | -0.091          | 0.112           | 0.203           | -0.080          | 0.149           | 0.229           | 0.1500 |
| 0.2000                    | -0.006          | 0.011           | 0.017           | -0.034          | 0.045           | 0.079           | -0.043          | 0.045           | 0.148           | 0.191           | -0.056          | -0.079          | 0.066           | 0.145           | -0.085          | 0.096           | 0.181           | -0.096          | 0.132           | 0.228           | 0.2000          |        |
| 0.3000                    | -0.036          | 0.045           | 0.081           | -0.049          | 0.069           | 0.118           | -0.059          | 0.047           | 0.106           |                 |                 |                 | -0.076          | 0.057           | 0.133           | -0.099          | 0.071           | 0.170           | -0.082          | 0.109           | 0.192           | 0.3000 |
| 0.4000                    | -0.071          | 0.049           | 0.120           | -0.067          | 0.054           | 0.121           | -0.072          | 0.038           | 0.109           |                 |                 |                 | -0.071          | 0.052           | 0.124           | -0.098          | 0.064           | 0.161           | -0.100          | 0.085           | 0.185           | 0.4000 |
| 0.5000                    | -0.076          | 0.048           | 0.124           | -0.072          | 0.037           | 0.108           | -0.075          | 0.032           | 0.107           |                 |                 |                 | -0.078          | 0.037           | 0.115           | -0.100          | 0.054           | 0.154           | -0.108          | 0.075           | 0.183           | 0.5000 |
| 0.6000                    | -0.042          | 0.037           | 0.079           | -0.075          | 0.024           | 0.099           | -0.079          | 0.020           | 0.099           |                 |                 |                 | -0.078          | 0.037           | 0.115           | -0.100          | 0.054           | 0.154           | -0.108          | 0.075           | 0.183           | 0.6000 |
| 0.7000                    | -0.033          | 0.026           | 0.059           | -0.077          | 0.014           | 0.091           | -0.077          | 0.016           | 0.094           |                 |                 |                 | -0.074          | 0.026           | 0.100           | -0.068          | 0.038           | 0.107           | -0.111          | 0.059           | 0.171           | 0.7000 |
| 0.8000                    | -0.069          | 0.002           | 0.071           | -0.074          | 0.007           | 0.082           | -0.078          | 0.007           | 0.085           |                 |                 |                 | -0.096          | 0.017           | 0.113           | -0.055          | 0.029           | 0.085           | -0.111          | 0.057           | 0.159           | 0.8000 |
| 0.9000                    | -0.064          | -0.002          | 0.061           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |



TABLE VI.- PRESSURE COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_W$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Concluded  
(c) BVWC;  $\delta = 10.7^\circ$  - Concluded

| x/c                      | 2y/b=0.200      |                 |                 | 2y/b=0.250      |                 |                 | 2y/b=0.300      |                 |                 | 2y/b=0.350      |                 |                 | 2y/b=0.400      |                 |                 | 2y/b=0.600      |                 |                 | 2y/b=0.800      |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> | C <sub>pu</sub> | C <sub>pl</sub> | ΔC <sub>p</sub> |        |
| M = 2.243      α = 08.31 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.025           | 0.006           | -0.019          | 0.005           | 0.247           | 0.242           | -0.105          | 0.341           | 0.445           | -0.143          | 0.300           | 0.443           | -0.136          | 0.375           | 0.510           | -0.102          | 0.405           | 0.507           | -0.095          | 0.374           |                 | 0.0000 |
| 0.0125                   | 0.004           | 0.102           | 0.098           | -0.047          | 0.220           | 0.267           | -0.104          | 0.286           | 0.390           | -0.143          | 0.263           | 0.404           | -0.129          | 0.326           | 0.455           | -0.112          | 0.362           | 0.473           | -0.123          |                 |                 | 0.0125 |
| 0.0250                   | -0.011          | 0.156           | 0.167           | -0.078          | 0.198           | 0.276           | -0.104          | 0.245           | 0.349           | -0.141          |                 |                 | -0.126          | 0.286           | 0.412           | -0.118          | 0.328           | 0.446           | -0.139          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.321           |                 | 0.0420 |
| 0.0500                   | -0.024          | 0.140           | 0.164           | -0.081          | 0.169           | 0.250           | -0.109          | 0.203           | 0.312           |                 | 0.227           |                 | -0.128          | 0.238           | 0.365           | -0.118          | 0.289           | 0.407           | -0.133          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.301           |                 | 0.0640 |
| 0.0750                   | -0.038          | 0.123           | 0.160           | -0.070          | 0.160           | 0.229           | -0.111          | 0.176           | 0.287           | -0.125          | 0.201           | 0.327           | -0.128          | 0.219           | 0.347           | -0.119          | 0.260           | 0.379           | -0.135          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.289           |                 | 0.0810 |
| 0.1000                   | -0.048          | 0.122           | 0.171           | -0.067          | 0.152           | 0.219           | -0.116          | 0.162           | 0.277           | -0.122          | 0.190           | 0.312           | -0.128          | 0.201           | 0.330           | -0.127          | 0.240           | 0.367           | -0.133          | 0.275           | 0.408           | 0.1000 |
| 0.1500                   | -0.072          | 0.120           | 0.192           | -0.080          | 0.137           | 0.217           | -0.116          | 0.146           | 0.262           | -0.123          | 0.163           | 0.286           | -0.126          | 0.175           | 0.301           | -0.138          | 0.206           | 0.344           | -0.133          | 0.255           | 0.389           | 0.1500 |
| 0.2000                   | -0.088          | 0.111           | 0.199           | -0.089          | 0.130           | 0.219           | -0.110          | 0.125           | 0.235           | -0.124          |                 |                 | -0.130          | 0.154           | 0.284           | -0.128          | 0.186           | 0.314           | -0.148          | 0.233           | 0.381           | 0.2000 |
| 0.3000                   | -0.099          | 0.106           | 0.205           | -0.100          | 0.128           | 0.228           | -0.112          | 0.116           | 0.228           |                 |                 |                 | -0.130          | 0.133           | 0.263           | -0.141          | 0.162           | 0.303           | -0.128          | 0.205           | 0.333           | 0.3000 |
| 0.4000                   | -0.117          | 0.101           | 0.218           | -0.109          | 0.100           | 0.209           | -0.112          | 0.097           | 0.209           |                 |                 |                 | -0.131          | 0.118           | 0.250           | -0.140          | 0.148           | 0.288           | -0.145          | 0.180           | 0.325           | 0.4000 |
| 0.5000                   | -0.112          | 0.093           | 0.205           | -0.112          | 0.086           | 0.198           | -0.110          | 0.086           | 0.196           |                 |                 |                 | -0.137          | 0.098           | 0.234           | -0.140          | 0.132           | 0.272           | -0.150          | 0.166           | 0.316           | 0.5000 |
| 0.6000                   | -0.064          | 0.072           | 0.137           | -0.108          | 0.073           | 0.181           | -0.109          | 0.072           | 0.181           |                 |                 |                 | -0.134          | 0.089           | 0.223           | -0.137          | 0.116           | 0.253           | -0.152          | 0.149           | 0.301           | 0.6000 |
| 0.7000                   | -0.053          | 0.069           | 0.122           | -0.107          | 0.063           | 0.169           | -0.105          | 0.068           | 0.174           |                 |                 |                 | -0.125          | 0.082           | 0.207           | -0.130          | 0.106           | 0.236           | -0.146          | 0.141           | 0.288           | 0.7000 |
| 0.8000                   | -0.088          | 0.045           | 0.133           | -0.105          | 0.049           | 0.154           | -0.103          | 0.059           | 0.162           |                 |                 |                 | -0.137          | 0.072           | 0.209           | -0.125          | 0.095           | 0.220           | -0.141          | 0.132           | 0.273           | 0.8000 |
| 0.9000                   | -0.095          | 0.037           | 0.132           | -0.100          | 0.045           | 0.145           | -0.100          | 0.048           | 0.148           |                 |                 |                 | -0.149          | 0.061           | 0.210           | -0.122          | 0.084           | 0.206           | -0.138          | 0.131           | 0.269           | 0.9000 |
| 1.0000                   | -0.074          | 0.047           | 0.121           | -0.091          | 0.052           | 0.143           | -0.096          | 0.034           | 0.130           |                 |                 |                 | -0.161          | 0.048           | 0.209           | -0.123          | 0.071           | 0.194           | -0.135          | 0.139           | 0.275           | 1.0000 |
| M = 2.235      α = 12.36 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.114          | 0.357           | 0.471           | -0.139          | 0.356           | 0.495           | -0.154          | 0.386           | 0.540           | -0.183          | 0.372           | 0.543           | -0.183          | 0.412           | 0.595           | -0.146          | 0.424           | 0.571           | -0.131          | 0.416           |                 | 0.0000 |
| 0.0125                   | -0.116          | 0.347           | 0.463           | -0.141          | 0.349           | 0.490           | -0.153          | 0.352           | 0.506           | -0.171          | 0.372           | 0.543           | -0.167          | 0.385           | 0.553           | -0.152          | 0.413           | 0.565           | -0.159          |                 |                 | 0.0125 |
| 0.0250                   | -0.117          | 0.331           | 0.448           | -0.142          | 0.337           | 0.479           | -0.153          | 0.326           | 0.479           | -0.171          | 0.350           | 0.521           | -0.158          | 0.362           | 0.520           | -0.155          | 0.399           | 0.555           | -0.175          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.394           |                 | 0.0420 |
| 0.0500                   | -0.119          | 0.281           | 0.400           | -0.144          | 0.297           | 0.441           | -0.153          | 0.296           | 0.449           |                 | 0.319           |                 | -0.160          | 0.325           | 0.485           | -0.155          | 0.367           | 0.522           | -0.170          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.380           |                 | 0.0640 |
| 0.0750                   | -0.121          | 0.256           | 0.377           | -0.142          | 0.273           | 0.415           | -0.153          | 0.272           | 0.425           | -0.163          | 0.288           | 0.450           | -0.162          | 0.303           | 0.466           | -0.156          | 0.339           | 0.495           | -0.171          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.368           |                 | 0.0810 |
| 0.1000                   | -0.130          | 0.250           | 0.380           | -0.141          | 0.250           | 0.391           | -0.155          | 0.261           | 0.417           | -0.160          | 0.273           | 0.433           | -0.163          | 0.285           | 0.448           | -0.158          | 0.325           | 0.483           | -0.167          | 0.359           | 0.526           | 0.1000 |
| 0.1500                   | -0.133          | 0.219           | 0.351           | -0.141          | 0.223           | 0.365           | -0.157          | 0.242           | 0.398           | -0.161          | 0.250           | 0.412           | -0.160          | 0.260           | 0.420           | -0.172          | 0.295           | 0.467           | -0.167          | 0.337           | 0.504           | 0.1500 |
| 0.2000                   | -0.134          | 0.209           | 0.343           | -0.146          | 0.221           | 0.366           | -0.156          | 0.301           | 0.457           | -0.163          |                 |                 | -0.163          | 0.241           | 0.404           | -0.155          | 0.278           | 0.433           | -0.180          | 0.321           | 0.501           | 0.2000 |
| 0.3000                   | -0.131          | 0.175           | 0.306           | -0.155          | 0.204           | 0.358           | -0.158          | 0.196           | 0.354           |                 |                 |                 | -0.161          | 0.212           | 0.372           | -0.167          | 0.246           | 0.413           | -0.155          | 0.289           | 0.444           | 0.3000 |
| 0.4000                   | -0.132          | 0.175           | 0.307           | -0.158          | 0.174           | 0.332           | -0.158          | 0.174           | 0.331           |                 |                 |                 | -0.161          | 0.192           | 0.353           | -0.166          | 0.231           | 0.396           | -0.174          | 0.265           | 0.438           | 0.4000 |
| 0.5000                   | -0.129          | 0.158           | 0.287           | -0.155          | 0.153           | 0.309           | -0.156          | 0.158           | 0.313           |                 |                 |                 | -0.166          | 0.175           | 0.341           | -0.167          | 0.210           | 0.376           | -0.177          | 0.251           | 0.428           | 0.5000 |
| 0.6000                   | -0.061          | 0.142           | 0.204           | -0.160          | 0.139           | 0.279           | -0.160          | 0.143           | 0.303           |                 |                 |                 | -0.164          | 0.162           | 0.326           | -0.167          | 0.192           | 0.359           | -0.177          | 0.231           | 0.408           | 0.6000 |
| 0.7000                   | -0.061          | 0.132           | 0.193           | -0.130          | 0.129           | 0.260           | -0.157          | 0.137           | 0.294           |                 |                 |                 | -0.157          | 0.148           | 0.305           | -0.164          | 0.180           | 0.343           | -0.175          | 0.221           | 0.395           | 0.7000 |
| 0.8000                   | -0.098          | 0.103           | 0.201           | -0.123          | 0.117           | 0.240           | -0.149          | 0.128           | 0.277           |                 |                 |                 | -0.163          | 0.142           | 0.305           | -0.164          | 0.166           | 0.330           | -0.172          | 0.210           | 0.382           | 0.8000 |
| 0.9000                   | -0.111          | 0.103           | 0.214           | -0.119          | 0.109           | 0.228           | -0.144          | 0.114           | 0.258           |                 |                 |                 | -0.171          | 0.129           | 0.300           | -0.164          | 0.149           | 0.313           | -0.169          | 0.210           | 0.379           | 0.9000 |
| 1.0000                   | -0.100          | 0.131           | 0.231           | -0.118          | 0.104           | 0.223           | -0.141          | 0.095           | 0.237           |                 |                 |                 | -0.181          | 0.109           | 0.289           | -0.164          | 0.129           | 0.293           | -0.166          | 0.221           | 0.386           | 1.0000 |
| M = 2.235      α = 16.42 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.164          | 0.451           | 0.615           | -0.163          | 0.427           | 0.590           | -0.178          | 0.421           | 0.599           | -0.187          | 0.429           | 0.616           | -0.207          | 0.435           | 0.643           | -0.174          | 0.442           | 0.616           | -0.152          | 0.426           |                 | 0.0000 |
| 0.0125                   | -0.162          | 0.453           | 0.615           | -0.168          | 0.431           | 0.599           | -0.178          | 0.420           | 0.598           | -0.187          | 0.429           | 0.616           | -0.187          | 0.439           | 0.626           | -0.173          | 0.460           | 0.633           | -0.178          |                 |                 | 0.0125 |
| 0.0250                   | -0.160          | 0.443           | 0.603           | -0.171          | 0.425           | 0.596           | -0.178          | 0.415           | 0.593           | -0.189          | 0.432           | 0.621           | -0.176          | 0.437           | 0.612           | -0.173          | 0.468           | 0.641           | -0.192          |                 |                 | 0.0250 |
| 0.0420                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.461           |                 | 0.0420 |
| 0.0500                   | -0.158          | 0.388           | 0.546           | -0.174          | 0.379           | 0.553           | -0.177          | 0.397           | 0.575           |                 | 0.406           |                 | -0.181          | 0.410           | 0.592           | -0.173          | 0.453           | 0.626           | -0.184          |                 |                 | 0.0500 |
| 0.0640                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.458           |                 | 0.0640 |
| 0.0750                   | -0.158          | 0.339           | 0.496           | -0.172          | 0.366           | 0.538           | -0.177          | 0.377           | 0.554           | -0.181          | 0.379           | 0.561           | -0.183          | 0.400           | 0.583           | -0.173          | 0.434           | 0.608           | -0.185          |                 |                 | 0.0750 |
| 0.0810                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | 0.446           |                 | 0.0810 |
| 0.1000                   | -0.164          | 0.338           | 0.501           | -0.171          | 0.349           | 0.520           | -0.177          | 0.366           | 0.543           | -0.181          | 0.366           | 0.547           | -0.184          | 0.384           | 0.569           | -0.173          | 0.422           | 0.595           | -0.184          | 0.440           | 0.624           | 0.1000 |
| 0.1500                   | -0.168          | 0.323           | 0.492           | -0.171          | 0.329           | 0.501           | -0.181          | 0.331           | 0.512           | -0.181          | 0.339           | 0.520           | -0.180          | 0.353           | 0.533           | -0.188          | 0.394           | 0.582           | -0.184          | 0.421           | 0.605           | 0.1500 |
| 0.2000                   | -0.169          | 0.298           | 0.467           | -0.173          | 0.323           | 0.496           | -0.182          | 0.381           | 0.563           | -0.183          |                 |                 | -0.184          | 0.333           | 0.517           | -0.171          | 0.372           | 0.543           | -0.196          | 0.406           | 0.602           | 0.2000 |
| 0.3000                   | -0.165          | 0.283           | 0.469           | -0.178          | 0.290           | 0.468           | -0.182          | 0.280           | 0.462           |                 |                 |                 | -0.183          | 0.293           | 0.476           | -0.186          | 0.336           | 0.522           | -0.170          | 0.380           | 0.550           | 0.3000 |
| 0.4000                   | -0.160          | 0.260           | 0.440           | -0.180          | 0.259           | 0.439           | -0.181          | 0.254           | 0.434           |                 |                 |                 | -0.183          | 0.283           | 0.466           | -0.186          | 0.316           | 0.502           | -0.189          | 0.353           | 0.543           | 0.4000 |
| 0.5000                   | -0.152          | 0.245           | 0.397           | -0.174          | 0.239           | 0.419           | -0.179          | 0.234           | 0.412           |                 |                 |                 | -0.186          | 0.259           | 0.446           | -0.187          | 0.292           | 0.483           | -0.194          | 0.338           | 0.532           | 0.5000 |
| 0.6000                   | -0.091          | 0.229           | 0.320           | -0.165          | 0.224           | 0.388           | -0.182          | 0.226           | 0.408           |                 |                 |                 | -0.183          | 0.245           | 0.428           | -0.187          | 0.275           | 0.462           | -0.197          | 0.317           | 0.510           | 0.6000 |
| 0.7000                   | -0.074          | 0.226           | 0.300           | -0.162          | 0.218           | 0.380           | -0.180          | 0.219           | 0.400           |                 |                 |                 | -0.178          | 0.235           | 0.413           | -0.185          | 0.262           | 0.447           | -0.191          | 0.308           | 0.499           | 0.7000 |
| 0.8000                   | -0.128          | 0.197           | 0.325           | -0.156          | 0.198           | 0.354           | -0.178          | 0.205           | 0.383           |                 |                 |                 | -0.179          | 0.219           | 0.39            |                 |                 |                 |                 |                 |                 |        |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 5.3° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION  
(a) BVW

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| x/c                      | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 0.700      α = -0.15 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 1.308           | 0.347           | -0.961          | -0.871          | 0.365           | 1.236           | -0.811          | 0.334           | 1.145           | -0.673          | 0.436           | 1.109           | -0.619          | 0.231           | 0.850           | 0.0000 |
| 0.0250                   | 0.141           | 0.258           | 0.118           | -0.895          | 0.257           | 1.152           | -0.845          | 0.275           | 1.120           | -0.685          | 0.302           | 0.987           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.537          | 0.187           | 0.725           | -0.861          | 0.182           | 1.043           | -0.843          | 0.222           | 1.065           | -0.687          | 0.209           | 0.896           | -0.562          | 0.181           | 0.743           | 0.0500 |
| 0.1000                   | -0.425          | 0.099           | 0.524           | -0.615          | 0.136           | 0.751           | -0.730          | 0.140           | 0.869           | -0.662          | 0.144           | 0.806           | -0.525          | 0.137           | 0.662           | 0.1000 |
| 0.1500                   | -0.341          | 0.069           | 0.409           | -0.469          | 0.092           | 0.432           | -0.548          | 0.102           | 0.650           | -0.635          | 0.106           | 0.741           | -0.508          | 0.100           | 0.609           | 0.1500 |
| 0.2000                   | -0.302          | 0.051           | 0.353           | -0.311          | 0.058           | 0.369           | -0.363          | 0.075           | 0.438           | -0.585          | 0.081           | 0.666           | -0.489          | 0.071           | 0.561           | 0.2000 |
| 0.3000                   | -0.279          | 0.008           | 0.287           | -0.241          | 0.036           | 0.277           | -0.215          | 0.049           | 0.266           | -0.421          | 0.044           | 0.464           | -0.451          | 0.044           | 0.495           | 0.3000 |
| 0.4000                   | -0.201          | -0.001          | 0.200           | -0.187          | 0.024           | 0.211           | -0.157          | 0.029           | 0.187           | -0.225          | 0.027           | 0.252           | -0.372          | 0.028           | 0.400           | 0.4000 |
| 0.5000                   | -0.161          | -0.001          | 0.160           | -0.129          | 0.013           | 0.142           | -0.133          | 0.026           | 0.159           | -0.112          | 0.015           | 0.127           | -0.286          | 0.018           | 0.304           | 0.5000 |
| 0.6000                   | -0.113          | 0.004           | 0.117           | -0.095          | 0.011           | 0.106           | -0.085          | 0.016           | 0.100           | -0.067          |                 | 0.067           | -0.188          |                 |                 | 0.6000 |
| 0.7000                   | -0.051          | 0.013           | 0.064           | -0.064          | 0.005           | 0.069           | -0.005          |                 | -0.037          | -0.005          |                 | 0.032           | -0.119          |                 |                 | 0.7000 |
| 0.8000                   | -0.030          | 0.018           | 0.048           | -0.029          | -0.002          | 0.027           | -0.033          | -0.009          | 0.024           | -0.023          | 0.001           | 0.024           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.107          | 0.020           | 0.127           | 0.053           | -0.015          | -0.068          | -0.040          | 0.039           | 0.078           | -0.042          | 0.045           | 0.087           | -0.089          | 0.058           | 0.147           | 1.0000 |
| M = 0.700      α = -0.05 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.927           | 0.056           | -0.871          | -0.597          | 0.111           | 0.708           | -1.186          | 0.255           | 1.441           | -1.351          | 0.317           | 1.668           | -1.341          | 0.135           | 1.476           | 0.0000 |
| 0.0250                   | 0.126           | 0.053           | -0.073          | -0.557          | 0.070           | 0.627           | -0.745          | 0.164           | 0.908           | -0.836          | 0.196           | 1.032           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.352          | 0.038           | 0.390           | -0.499          | 0.037           | 0.536           | -0.464          | 0.097           | 0.561           | -0.495          | 0.113           | 0.608           | -0.689          | 0.102           | 0.791           | 0.0500 |
| 0.1000                   | -0.342          | -0.026          | 0.315           | -0.329          | -0.002          | 0.327           | -0.386          | 0.036           | 0.422           | -0.332          | 0.062           | 0.394           | -0.334          | 0.071           | 0.406           | 0.1000 |
| 0.1500                   | -0.277          | -0.040          | 0.236           | -0.287          | -0.016          | 0.271           | -0.297          | 0.011           | 0.308           | -0.280          | 0.034           | 0.314           | -0.278          | 0.043           | 0.321           | 0.1500 |
| 0.2000                   | -0.264          | -0.051          | 0.213           | -0.254          | -0.029          | 0.225           | -0.259          | -0.003          | 0.256           | -0.245          | 0.014           | 0.259           | -0.237          | 0.018           | 0.255           | 0.2000 |
| 0.3000                   | -0.249          | -0.072          | 0.177           | -0.190          | -0.037          | 0.153           | -0.196          | -0.016          | 0.180           | -0.186          | -0.007          | 0.179           | -0.195          | 0.001           | 0.195           | 0.3000 |
| 0.4000                   | -0.207          | -0.069          | 0.139           | -0.161          | -0.037          | 0.124           | -0.167          | -0.023          | 0.146           | -0.158          | -0.015          | 0.143           | -0.162          | -0.008          | 0.155           | 0.4000 |
| 0.5000                   | -0.156          | -0.051          | 0.105           | -0.121          | -0.029          | 0.093           | -0.119          | -0.017          | 0.102           | -0.125          | -0.021          | 0.105           | -0.131          | -0.008          | 0.123           | 0.5000 |
| 0.6000                   | -0.095          | -0.033          | 0.062           | -0.083          | -0.019          | 0.064           | -0.087          | -0.019          | 0.068           | -0.097          | -0.025          | 0.072           | -0.101          |                 |                 | 0.6000 |
| 0.7000                   | -0.048          | -0.005          | 0.044           | -0.058          | -0.020          | 0.038           | -0.032          | -0.030          |                 | -0.066          | -0.030          | 0.036           | -0.086          |                 |                 | 0.7000 |
| 0.8000                   | -0.027          | -0.004          | 0.023           | -0.029          | -0.024          | 0.006           | -0.034          | -0.030          | 0.004           | -0.051          | -0.019          | 0.032           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.061          | -0.084          | -0.023          | 0.036           | -0.041          | -0.077          | 0.005           | 0.015           | 0.010           | -0.072          | 0.050           | 0.121           | -0.133          | 0.118           | 0.251           | 1.0000 |
| M = 0.698      α = 03.91 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.781           | 0.051           | -0.730          | -0.153          | -0.024          | 0.129           | -0.448          | 0.116           | 0.564           | -0.459          | 0.166           | 0.624           | -0.576          | 0.020           | 0.596           | 0.0000 |
| 0.0250                   | 0.139           | -0.032          | -0.171          | -0.268          | -0.053          | 0.215           | -0.375          | 0.041           | 0.417           | -0.381          | 0.082           | 0.463           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.250          | -0.091          | 0.160           | -0.333          | -0.073          | 0.215           | -0.375          | 0.041           | 0.310           | -0.319          | 0.026           | 0.344           | -0.364          | 0.025           | 0.389           | 0.0500 |
| 0.1000                   | -0.270          | -0.137          | 0.133           | -0.313          | -0.086          | 0.228           | -0.259          | -0.038          | 0.221           | -0.237          | -0.004          | 0.233           | -0.233          | 0.017           | 0.250           | 0.1000 |
| 0.1500                   | -0.267          | -0.133          | 0.134           | -0.260          | -0.091          | 0.169           | -0.215          | -0.044          | 0.171           | -0.194          | -0.019          | 0.175           | -0.184          | -0.004          | 0.180           | 0.1500 |
| 0.2000                   | -0.252          | -0.129          | 0.124           | -0.234          | -0.092          | 0.143           | -0.193          | -0.050          | 0.143           | -0.168          | -0.029          | 0.139           | -0.156          | -0.017          | 0.139           | 0.2000 |
| 0.3000                   | -0.239          | -0.128          | 0.111           | -0.206          | -0.087          | 0.119           | -0.151          | -0.047          | 0.105           | -0.129          | -0.038          | 0.090           | -0.136          | -0.026          | 0.110           | 0.3000 |
| 0.4000                   | -0.193          | -0.113          | 0.080           | -0.158          | -0.077          | 0.081           | -0.119          | -0.043          | 0.076           | -0.113          | -0.038          | 0.075           | -0.119          | -0.028          | 0.091           | 0.4000 |
| 0.5000                   | -0.141          | -0.078          | 0.063           | -0.125          | -0.058          | 0.068           | -0.101          | -0.031          | 0.070           | -0.089          | -0.036          | 0.053           | -0.095          | -0.021          | 0.074           | 0.5000 |
| 0.6000                   | -0.097          | -0.041          | 0.056           | -0.087          | -0.041          | 0.046           | -0.072          | -0.030          | 0.042           | -0.068          | -0.032          | 0.037           | -0.069          |                 |                 | 0.6000 |
| 0.7000                   | -0.043          | -0.020          | 0.023           | -0.055          | -0.022          | 0.034           | -0.037          | -0.030          |                 | -0.042          | -0.033          | 0.009           | -0.064          |                 |                 | 0.7000 |
| 0.8000                   | -0.020          | -0.007          | 0.013           | -0.034          | -0.025          | 0.009           | -0.018          | -0.030          | -0.012          | -0.032          | -0.020          | 0.012           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.064          | -0.006          | 0.059           | -0.025          | -0.104          | -0.079          | 0.033           | 0.025           | -0.008          | -0.058          | 0.053           | 0.111           | -0.170          | 0.125           | 0.295           | 1.0000 |
| M = 0.700      α = 07.96 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 1.277           | 0.139           | -1.138          | -0.524          | -0.017          | 0.508           | -0.386          | 0.054           | 0.440           | -0.343          | 0.057           | 0.400           | -0.354          | -0.097          | 0.257           | 0.0000 |
| 0.0250                   | 0.118           | 0.052           | -0.067          | -0.520          | -0.069          | 0.450           | -0.380          | -0.021          | 0.359           | -0.311          | -0.007          | 0.304           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.551          | -0.020          | 0.531           | -0.505          | -0.104          | 0.401           | -0.363          | -0.069          | 0.294           | -0.282          | -0.049          | 0.233           | -0.263          | -0.063          | 0.201           | 0.0500 |
| 0.1000                   | -0.422          | -0.117          | 0.305           | -0.447          | -0.121          | 0.326           | -0.297          | -0.090          | 0.208           | -0.230          | -0.066          | 0.165           | -0.205          | -0.050          | 0.154           | 0.1000 |
| 0.1500                   | -0.414          | -0.136          | 0.278           | -0.372          | -0.128          | 0.244           | -0.263          | -0.093          | 0.170           | -0.209          | -0.071          | 0.138           | -0.179          | -0.061          | 0.118           | 0.1500 |
| 0.2000                   | -0.355          | -0.139          | 0.216           | -0.321          | -0.130          | 0.191           | -0.238          | -0.093          | 0.145           | -0.184          | -0.076          | 0.108           | -0.159          | -0.067          | 0.093           | 0.2000 |
| 0.3000                   | -0.325          | -0.149          | 0.176           | -0.272          | -0.122          | 0.149           | -0.193          | -0.083          | 0.111           | -0.156          | -0.076          | 0.079           | -0.134          | -0.070          | 0.065           | 0.3000 |
| 0.4000                   | -0.244          | -0.138          | 0.106           | -0.209          | -0.105          | 0.104           | -0.161          | -0.074          | 0.087           | -0.130          | -0.071          | 0.060           | -0.122          | -0.064          | 0.059           | 0.4000 |
| 0.5000                   | -0.161          | -0.103          | 0.059           | -0.158          | -0.076          | 0.082           | -0.132          | -0.059          | 0.073           | -0.105          | -0.065          | 0.040           | -0.098          | -0.050          | 0.049           | 0.5000 |
| 0.6000                   | -0.106          | -0.058          | 0.047           | -0.116          | -0.050          | 0.066           | -0.099          | -0.053          | 0.046           | -0.084          | -0.037          | 0.027           | -0.076          |                 |                 | 0.6000 |
| 0.7000                   | -0.034          | -0.025          | 0.009           | -0.087          | -0.044          | 0.043           | -0.060          | -0.030          |                 | -0.061          | -0.058          | 0.003           | -0.075          |                 |                 | 0.7000 |
| 0.8000                   | -0.017          | -0.017          | 0.001           | -0.060          | -0.042          | 0.018           | -0.046          | -0.048          | -0.002          | -0.051          | -0.042          | 0.009           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.149          | -0.075          | 0.074           | -0.019          | -0.054          | -0.036          | -0.014          | 0.034           | 0.048           | -0.068          | 0.039           | 0.107           | -0.199          | 0.141           | 0.340           | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                       | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 0.697      α = 11.96  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 2.137           | 0.472           | -1.664          | -0.926          | 0.072           | 0.998           | -0.705          | 0.071           | 0.776           | -0.324          | -0.049          | 0.275           | -0.236          | -0.229          | 0.007           | 0.0000 |
| 0.0250                    | 0.115           | 0.373           | 0.258           | -0.940          | 0.007           | 0.947           | -0.614          | -0.023          | 0.591           | -0.321          | -0.089          | 0.232           | -0.202          | -0.160          | 0.042           | 0.0250 |
| 0.0500                    | -1.070          | 0.272           | 1.342           | -0.883          | -0.044          | 0.840           | -0.541          | -0.087          | 0.454           | -0.310          | -0.114          | 0.196           | -0.177          | -0.127          | 0.050           | 0.0500 |
| 0.1000                    | -0.929          | 0.063           | 0.992           | -0.956          | -0.102          | 0.453           | -0.452          | 0.124           | 0.328           | -0.267          | -0.121          | 0.146           | -0.177          | -0.127          | 0.050           | 0.1000 |
| 0.1500                    | -0.815          | -0.031          | 0.783           | -0.498          | -0.127          | 0.371           | -0.395          | -0.127          | 0.268           | -0.247          | -0.122          | 0.125           | -0.163          | -0.129          | 0.034           | 0.1500 |
| 0.2000                    | -0.744          | -0.070          | 0.673           | -0.449          | -0.135          | 0.314           | -0.353          | -0.129          | 0.224           | -0.223          | -0.124          | 0.099           | -0.151          | -0.126          | 0.025           | 0.2000 |
| 0.3000                    | -0.640          | -0.135          | 0.505           | -0.399          | -0.138          | 0.262           | -0.293          | -0.119          | 0.175           | -0.189          | -0.122          | 0.067           | -0.135          | -0.120          | 0.015           | 0.3000 |
| 0.4000                    | -0.505          | -0.137          | 0.368           | -0.343          | -0.134          | 0.209           | -0.235          | -0.111          | 0.124           | -0.165          | -0.110          | 0.055           | -0.130          | -0.108          | 0.022           | 0.4000 |
| 0.5000                    | -0.367          | -0.132          | 0.235           | -0.235          | -0.101          | 0.134           | -0.194          | -0.091          | 0.103           | -0.146          | -0.102          | 0.043           | -0.115          | -0.088          | 0.027           | 0.5000 |
| 0.6000                    | -0.295          | -0.077          | 0.218           | -0.173          | -0.075          | 0.098           | -0.137          | -0.084          | 0.053           | -0.120          | -0.102          | 0.017           | -0.097          |                 |                 | 0.6000 |
| 0.7000                    | -0.199          | -0.051          | 0.148           | -0.117          | -0.072          | 0.045           | -0.093          | -0.043          | -0.092          | -0.089          | -0.003          | -0.096          |                 |                 |                 | 0.7000 |
| 0.8000                    | -0.123          | -0.039          | 0.084           | -0.088          | -0.074          | 0.014           | -0.074          | -0.082          | -0.008          | -0.078          | -0.071          | 0.007           |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.037          | -0.063          | -0.026          | -0.110          | -0.097          | 0.014           | -0.076          | -0.001          | 0.075           | -0.093          | -0.023          | 0.070           | -0.200          | 0.140           | 0.340           | 1.0000 |
| M = 0.699      α = 15.87  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 1.229           | 0.353           | -0.876          | -0.729          | -0.268          | 0.461           | -0.741          | -0.454          | 0.287           | -0.675          | -0.455          | 0.219           | -0.478          | -0.568          | -0.090          | 0.0000 |
| 0.0250                    | -0.091          | 0.415           | 0.323           | -0.704          | -0.240          | 0.464           | -0.740          | -0.406          | 0.334           | -0.662          | -0.407          | 0.254           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.590          | 0.415           | 1.004           | -0.688          | -0.223          | 0.465           | -0.733          | -0.374          | 0.359           | -0.647          | -0.378          | 0.269           | -0.457          | -0.456          | 0.002           | 0.0500 |
| 0.1000                    | -0.583          | 0.229           | 0.812           | -0.681          | -0.221          | 0.459           | -0.699          | -0.358          | 0.341           | -0.613          | -0.378          | 0.234           | -0.438          | -0.395          | 0.044           | 0.1000 |
| 0.1500                    | -0.591          | 0.076           | 0.667           | -0.669          | -0.229          | 0.440           | -0.672          | -0.352          | 0.320           | -0.594          | -0.368          | 0.226           | -0.421          | -0.385          | 0.037           | 0.1500 |
| 0.2000                    | -0.603          | -0.001          | 0.602           | -0.658          | -0.234          | 0.424           | -0.650          | -0.348          | 0.302           | -0.576          | -0.360          | 0.216           | -0.408          | -0.365          | 0.043           | 0.2000 |
| 0.3000                    | -0.611          | -0.125          | 0.486           | -0.647          | -0.250          | 0.397           | -0.629          | -0.329          | 0.300           | -0.538          | -0.352          | 0.186           | -0.389          | -0.337          | 0.052           | 0.3000 |
| 0.4000                    | -0.616          | -0.174          | 0.442           | -0.637          | -0.270          | 0.367           | -0.616          | -0.326          | 0.290           | -0.514          | -0.338          | 0.176           | -0.370          | -0.322          | 0.048           | 0.4000 |
| 0.5000                    | -0.613          | -0.194          | 0.419           | -0.622          | -0.264          | 0.358           | -0.581          | -0.310          | 0.271           | -0.482          | -0.331          | 0.151           | -0.339          | -0.291          | 0.048           | 0.5000 |
| 0.6000                    | -0.607          | -0.195          | 0.412           | -0.607          | -0.242          | 0.365           | -0.559          | -0.312          | 0.246           | -0.447          | -0.324          | 0.123           | -0.304          |                 |                 | 0.6000 |
| 0.7000                    | -0.594          | -0.188          | 0.406           | -0.587          | -0.255          | 0.332           | -0.520          | -0.320          |                 | -0.411          | -0.311          | 0.100           | -0.283          |                 |                 | 0.7000 |
| 0.8000                    | -0.571          | -0.201          | 0.371           | -0.547          | -0.282          | 0.265           | -0.464          | -0.327          | 0.137           | -0.370          | -0.296          | 0.075           |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.496          | -0.283          | 0.213           | -0.406          | -0.380          | 0.026           | -0.301          | -0.338          | -0.037          | -0.272          | -0.255          | 0.017           | -0.302          | 0.080           | 0.383           | 1.0000 |
| M = 1.302      α = -03.90 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.144           | 0.350           | 0.206           | -0.337          | 0.299           | 0.636           | -0.164          | 0.283           | 0.447           | -0.485          | 0.358           | 0.842           | -0.408          | 0.152           | 0.560           | 0.0000 |
| 0.0250                    | -0.080          | 0.286           | 0.366           | -0.346          | 0.243           | 0.589           | -0.343          | 0.249           | 0.592           | -0.468          | 0.265           | 0.733           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.214          | 0.230           | 0.444           | -0.350          | 0.201           | 0.551           | -0.444          | 0.215           | 0.660           | -0.448          | 0.199           | 0.646           | -0.437          | 0.119           | 0.556           | 0.0500 |
| 0.1000                    | -0.213          | 0.141           | 0.353           | -0.339          | 0.160           | 0.499           | -0.415          | 0.152           | 0.567           | -0.395          | 0.147           | 0.542           | -0.436          | 0.089           | 0.524           | 0.1000 |
| 0.1500                    | -0.149          | 0.135           | 0.284           | -0.283          | 0.139           | 0.423           | -0.383          | 0.119           | 0.502           | -0.385          | 0.100           | 0.485           | -0.402          | 0.061           | 0.463           | 0.1500 |
| 0.2000                    | -0.136          | 0.129           | 0.265           | -0.218          | 0.114           | 0.332           | -0.365          | 0.090           | 0.456           | -0.388          | 0.059           | 0.448           | -0.387          | 0.029           | 0.417           | 0.2000 |
| 0.3000                    | -0.122          | 0.084           | 0.206           | -0.157          | 0.066           | 0.223           | -0.121          | 0.059           | 0.180           | -0.380          | 0.015           | 0.395           | -0.374          | -0.003          | 0.370           | 0.3000 |
| 0.4000                    | -0.135          | 0.060           | 0.194           | -0.151          | 0.034           | 0.185           | -0.155          | 0.004           | 0.159           | -0.262          | -0.005          | 0.256           | -0.369          | -0.002          | 0.367           | 0.4000 |
| 0.5000                    | -0.139          | 0.003           | 0.143           | -0.147          | 0.006           | 0.153           | -0.167          | 0.004           | 0.171           | -0.196          | -0.005          | 0.191           | -0.355          | -0.019          | 0.336           | 0.5000 |
| 0.6000                    | -0.121          | 0.013           | 0.134           | -0.132          | 0.005           | 0.137           | -0.166          | 0.000           | 0.166           | -0.182          | -0.014          | 0.168           | -0.278          |                 |                 | 0.6000 |
| 0.7000                    | -0.108          | 0.005           | 0.113           | -0.140          |                 | 0.140           |                 | -0.018          |                 | -0.163          | -0.038          | 0.125           | -0.181          |                 |                 | 0.7000 |
| 0.8000                    | -0.098          | -0.031          | 0.067           | -0.108          | -0.033          | 0.075           | -0.121          | -0.070          | 0.051           | -0.139          | -0.081          | 0.058           |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.087          | -0.184          | -0.097          | 0.080           | -0.182          | -0.263          | -0.019          | -0.270          | -0.251          | -0.076          | -0.226          | -0.150          | 0.242           | -0.377          | -0.618          | 1.0000 |
| M = 1.304      α = -00.05 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.156          | 0.004           | 0.161           | -0.160          | 0.090           | 0.250           | -0.333          | 0.064           | 0.397           | -0.326          | 0.208           | 0.534           | -0.387          | 0.017           | 0.404           | 0.0000 |
| 0.0250                    | -0.158          | 0.062           | 0.220           | -0.241          | 0.066           | 0.307           | -0.358          | 0.079           | 0.436           | -0.369          | 0.121           | 0.490           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.159          | 0.087           | 0.246           | -0.281          | 0.049           | 0.330           | -0.360          | 0.077           | 0.437           | -0.385          | 0.062           | 0.446           | -0.379          | 0.020           | 0.399           | 0.0500 |
| 0.1000                    | -0.156          | 0.040           | 0.196           | -0.240          | 0.036           | 0.277           | -0.295          | 0.027           | 0.322           | -0.329          | 0.026           | 0.356           | -0.366          | 0.009           | 0.374           | 0.1000 |
| 0.1500                    | -0.157          | 0.008           | 0.166           | -0.218          | 0.013           | 0.232           | -0.270          | 0.004           | 0.274           | -0.315          | -0.005          | 0.311           | -0.346          | -0.016          | 0.330           | 0.1500 |
| 0.2000                    | -0.155          | -0.008          | 0.152           | -0.200          | -0.003          | 0.197           | -0.239          | -0.016          | 0.222           | -0.309          | -0.034          | 0.275           | -0.336          | -0.048          | 0.288           | 0.2000 |
| 0.3000                    | -0.150          | -0.003          | 0.147           | -0.180          | -0.023          | 0.155           | -0.180          | -0.023          | 0.146           | -0.275          | -0.051          | 0.224           | -0.327          | -0.089          | 0.238           | 0.3000 |
| 0.4000                    | -0.169          | -0.027          | 0.142           | -0.170          | -0.057          | 0.113           | -0.188          | -0.070          | 0.117           | -0.207          | -0.101          | 0.105           | -0.304          | -0.105          | 0.200           | 0.4000 |
| 0.5000                    | -0.169          | -0.090          | 0.079           | -0.166          | -0.093          | 0.073           | -0.193          | -0.094          | 0.099           | -0.216          | -0.098          | 0.118           | -0.233          | -0.097          | 0.136           | 0.5000 |
| 0.6000                    | -0.144          | -0.083          | 0.061           | -0.156          | -0.092          | 0.064           | -0.196          | -0.089          | 0.107           | -0.210          | -0.101          | 0.110           | -0.200          |                 |                 | 0.6000 |
| 0.7000                    | -0.139          | -0.081          | 0.058           | -0.174          | -0.085          | 0.090           |                 | -0.105          |                 | -0.195          | -0.109          | 0.086           | -0.200          |                 |                 | 0.7000 |
| 0.8000                    | -0.107          | -0.092          | 0.015           | -0.127          | -0.075          | 0.051           | -0.124          | -0.097          | 0.027           | -0.173          | -0.111          | 0.062           |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.038           | -0.152          | -0.190          | 0.166           | -0.050          | -0.217          | 0.053           | -0.007          | -0.060          | -0.112          | -0.097          | 0.014           | -0.399          | 0.283           | 0.683           | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

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| x/c                      | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 1.303      α = 04.11 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.212          | -0.079          | 0.133           | -0.176          | -0.091          | 0.085           | -0.176          | 0.013           | 0.188           | -0.240          | 0.019           | 0.259           | -0.300          | -0.154          | 0.145           | 0.0000 |
| 0.0250                   | -0.201          | -0.075          | 0.127           | -0.194          | -0.106          | 0.088           | -0.224          | -0.032          | 0.192           | -0.268          | -0.039          | 0.229           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.190          | -0.077          | 0.113           | -0.207          | -0.115          | 0.092           | -0.248          | -0.068          | 0.181           | -0.280          | -0.079          | 0.202           | -0.313          | -0.108          | 0.205           | 0.0500 |
| 0.1000                   | -0.165          | -0.103          | 0.062           | -0.216          | -0.116          | 0.100           | -0.225          | -0.112          | 0.113           | -0.259          | -0.106          | 0.153           | -0.308          | -0.092          | 0.216           | 0.1000 |
| 0.1500                   | -0.192          | -0.107          | 0.085           | -0.215          | -0.110          | 0.105           | -0.214          | -0.112          | 0.103           | -0.253          | -0.119          | 0.135           | -0.287          | -0.107          | 0.180           | 0.1500 |
| 0.2000                   | -0.187          | -0.114          | 0.073           | -0.209          | -0.107          | 0.102           | -0.207          | -0.126          | 0.081           | -0.245          | -0.135          | 0.110           | -0.274          | -0.142          | 0.131           | 0.2000 |
| 0.3000                   | -0.191          | -0.124          | 0.067           | -0.197          | -0.134          | 0.063           | -0.209          | -0.146          | 0.063           | -0.241          | -0.145          | 0.097           | -0.254          | -0.175          | 0.079           | 0.3000 |
| 0.4000                   | -0.200          | -0.139          | 0.061           | -0.191          | -0.144          | 0.047           | -0.222          | -0.166          | 0.056           | -0.245          | -0.167          | 0.078           | -0.250          | -0.183          | 0.067           | 0.4000 |
| 0.5000                   | -0.209          | -0.172          | 0.038           | -0.207          | -0.172          | 0.035           | -0.231          | -0.158          | 0.073           | -0.242          | -0.205          | 0.037           | -0.249          | -0.162          | 0.087           | 0.5000 |
| 0.6000                   | -0.192          | -0.169          | 0.024           | -0.210          | -0.173          | 0.037           | -0.227          | -0.189          | 0.038           | -0.224          | -0.187          | 0.037           | -0.236          |                 |                 | 0.6000 |
| 0.7000                   | -0.196          | -0.158          | 0.038           | -0.199          | -0.153          | 0.047           |                 | -0.154          |                 | -0.209          | -0.167          | 0.042           | -0.225          |                 |                 | 0.7000 |
| 0.8000                   | -0.128          | -0.115          | 0.013           | -0.188          | -0.141          | 0.047           | -0.190          | -0.149          | 0.042           | -0.198          | -0.144          | 0.054           |                 |                 |                 | 0.8000 |
| 1.0000                   | 0.221           | 0.071           | -0.150          | -0.160          | -0.140          | 0.021           | -0.117          | -0.225          | -0.108          | -0.188          | -0.090          | 0.099           | -0.206          | 0.396           | 0.602           | 1.0000 |
| M = 1.302      α = 08.11 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.078           | 0.058           | -0.019          | -0.115          | -0.173          | -0.058          | -0.110          | -0.198          | -0.088          | -0.132          | -0.169          | -0.038          | -0.167          | -0.264          | -0.097          | 0.0000 |
| 0.0250                   | -0.176          | -0.010          | 0.166           | -0.210          | -0.156          | 0.054           | -0.188          | -0.199          | -0.011          | -0.205          | -0.199          | 0.007           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.328          | -0.062          | 0.266           | -0.270          | -0.152          | 0.118           | -0.238          | -0.196          | 0.042           | -0.253          | -0.214          | 0.039           | -0.253          | -0.223          | 0.029           | 0.0500 |
| 0.1000                   | -0.328          | -0.120          | 0.208           | -0.286          | -0.186          | 0.100           | -0.254          | -0.181          | 0.073           | -0.269          | -0.202          | 0.067           | -0.293          | -0.206          | 0.087           | 0.1000 |
| 0.1500                   | -0.324          | -0.156          | 0.168           | -0.292          | -0.180          | 0.113           | -0.266          | -0.184          | 0.082           | -0.282          | -0.198          | 0.084           | -0.287          | -0.211          | 0.076           | 0.1500 |
| 0.2000                   | -0.307          | -0.155          | 0.152           | -0.300          | -0.184          | 0.116           | -0.283          | -0.207          | 0.077           | -0.289          | -0.201          | 0.087           | -0.281          | -0.218          | 0.063           | 0.2000 |
| 0.3000                   | -0.274          | -0.161          | 0.112           | -0.284          | -0.192          | 0.091           | -0.282          | -0.212          | 0.071           | -0.279          | -0.229          | 0.049           | -0.272          | -0.224          | 0.048           | 0.3000 |
| 0.4000                   | -0.266          | -0.185          | 0.081           | -0.280          | -0.217          | 0.063           | -0.280          | -0.218          | 0.062           | -0.278          | -0.239          | 0.039           | -0.270          | -0.220          | 0.050           | 0.4000 |
| 0.5000                   | -0.248          | -0.208          | 0.046           | -0.275          | -0.225          | 0.050           | -0.285          | -0.233          | 0.052           | -0.279          | -0.224          | 0.055           | -0.268          | -0.212          | 0.056           | 0.5000 |
| 0.6000                   | -0.220          | -0.220          | 0.000           | -0.270          | -0.239          | 0.031           | -0.274          | -0.227          | 0.047           | -0.263          | -0.227          | 0.036           | -0.250          |                 |                 | 0.6000 |
| 0.7000                   | -0.223          | -0.231          | -0.008          | -0.253          | -0.212          | 0.041           |                 | -0.206          |                 | -0.243          | -0.200          | 0.044           | -0.227          |                 |                 | 0.7000 |
| 0.8000                   | -0.129          | -0.137          | -0.007          | -0.235          | -0.196          | 0.039           | -0.215          | -0.200          | 0.015           | -0.224          | -0.195          | 0.029           |                 |                 |                 | 0.8000 |
| 1.0000                   | 0.349           | 0.369           | 0.020           | -0.197          | -0.199          | -0.002          | -0.107          | -0.235          | -0.128          | -0.188          | -0.255          | -0.067          | -0.128          | -0.101          | 0.027           | 1.0000 |
| M = 1.302      α = 12.21 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.799           | -0.091          | -0.890          | 0.011           | -0.218          | -0.229          | 0.041           | -0.162          | -0.203          | -0.034          | -0.373          | -0.339          | -0.067          | -0.472          | -0.405          | 0.0000 |
| 0.0250                   | -0.149          | -0.065          | 0.084           | -0.144          | -0.192          | -0.048          | -0.100          | -0.240          | -0.140          | -0.127          | -0.355          | -0.229          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.716          | -0.055          | 0.661           | -0.252          | -0.176          | 0.076           | -0.192          | -0.282          | -0.091          | -0.191          | -0.339          | -0.148          | -0.190          | -0.381          | -0.192          | 0.0500 |
| 0.1000                   | -0.713          | -0.085          | 0.628           | -0.328          | -0.172          | 0.156           | -0.229          | -0.261          | -0.032          | -0.235          | -0.307          | -0.072          | -0.255          | -0.324          | -0.069          | 0.1000 |
| 0.1500                   | -0.709          | -0.136          | 0.573           | -0.364          | -0.173          | 0.191           | -0.271          | -0.251          | 0.020           | -0.264          | -0.293          | -0.029          | -0.264          | -0.300          | -0.037          | 0.1500 |
| 0.2000                   | -0.700          | -0.133          | 0.567           | -0.388          | -0.192          | 0.196           | -0.308          | -0.256          | 0.052           | -0.286          | -0.290          | -0.004          | -0.273          | -0.294          | -0.021          | 0.2000 |
| 0.3000                   | -0.645          | -0.152          | 0.493           | -0.419          | -0.228          | 0.191           | -0.343          | -0.270          | 0.073           | -0.305          | -0.287          | 0.018           | -0.287          | -0.302          | -0.015          | 0.3000 |
| 0.4000                   | -0.584          | -0.192          | 0.392           | -0.452          | -0.256          | 0.196           | -0.375          | -0.279          | 0.096           | -0.330          | -0.296          | 0.034           | -0.304          | -0.294          | 0.010           | 0.4000 |
| 0.5000                   | -0.491          | -0.236          | 0.255           | -0.465          | -0.281          | 0.185           | -0.390          | -0.284          | 0.106           | -0.344          | -0.282          | 0.061           | -0.276          | -0.291          | 0.025           | 0.5000 |
| 0.6000                   | -0.375          | -0.255          | 0.120           | -0.415          | -0.275          | 0.140           | -0.390          | -0.272          | 0.118           | -0.300          | -0.259          | 0.040           | -0.247          |                 |                 | 0.6000 |
| 0.7000                   | -0.329          | -0.245          | 0.083           | -0.320          | -0.258          | 0.062           |                 | -0.243          |                 | -0.280          | -0.251          | 0.030           | -0.239          |                 |                 | 0.7000 |
| 0.8000                   | -0.183          | -0.095          | 0.088           | -0.150          | -0.097          | 0.052           | -0.195          | -0.220          | -0.026          | -0.148          | -0.216          | -0.068          |                 |                 |                 | 0.8000 |
| 1.0000                   | 0.406           | 0.627           | 0.221           | 0.417           | 0.654           | 0.237           | 0.263           | -0.197          | -0.460          | 0.454           | -0.069          | -0.523          | -0.345          | 0.501           | 0.846           | 1.0000 |
| M = 1.300      α = 16.07 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.850           | -0.452          | -1.302          | -0.547          | -0.535          | 0.012           | -0.251          | -0.331          | -0.080          | 0.028           | -0.467          | -0.495          | 0.003           | -0.497          | -0.500          | 0.0000 |
| 0.0250                   | -0.060          | -0.339          | -0.279          | -0.582          | -0.528          | 0.054           | -0.374          | -0.254          | 0.120           | -0.089          | -0.443          | -0.355          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.605          | -0.263          | 0.342           | -0.603          | -0.520          | 0.083           | -0.448          | -0.219          | 0.229           | -0.172          | -0.434          | -0.262          | -0.143          | -0.479          | -0.336          | 0.0500 |
| 0.1000                   | -0.603          | -0.225          | 0.378           | -0.606          | -0.506          | 0.101           | -0.450          | -0.277          | 0.173           | -0.237          | -0.456          | -0.219          | -0.225          | -0.468          | -0.243          | 0.1000 |
| 0.1500                   | -0.606          | -0.180          | 0.427           | -0.607          | -0.499          | 0.107           | -0.446          | -0.321          | 0.125           | -0.279          | -0.325          | -0.045          | -0.243          | -0.465          | -0.223          | 0.1500 |
| 0.2000                   | -0.607          | -0.146          | 0.462           | -0.610          | -0.484          | 0.125           | -0.460          | -0.340          | 0.120           | -0.313          | -0.312          | 0.001           | -0.260          | -0.459          | -0.198          | 0.2000 |
| 0.3000                   | -0.611          | -0.116          | 0.495           | -0.613          | -0.479          | 0.134           | -0.475          | -0.356          | 0.120           | -0.340          | -0.307          | 0.033           | -0.283          | -0.356          | -0.073          | 0.3000 |
| 0.4000                   | -0.613          | -0.099          | 0.514           | -0.609          | -0.503          | 0.106           | -0.487          | -0.368          | 0.119           | -0.362          | -0.252          | 0.110           | -0.304          | -0.262          | 0.062           | 0.4000 |
| 0.5000                   | -0.614          | -0.110          | 0.505           | -0.608          | -0.497          | 0.111           | -0.499          | -0.312          | 0.187           | -0.375          | -0.229          | 0.146           | -0.305          | -0.181          | 0.124           | 0.5000 |
| 0.6000                   | -0.614          | -0.100          | 0.514           | -0.574          | -0.470          | 0.103           | -0.488          | -0.301          | 0.187           | -0.372          | -0.190          | 0.181           | -0.264          |                 |                 | 0.6000 |
| 0.7000                   | -0.608          | -0.146          | 0.462           | -0.570          | -0.300          | 0.269           |                 | -0.363          |                 | -0.319          | -0.166          | 0.153           | -0.220          |                 |                 | 0.7000 |
| 0.8000                   | -0.574          | 0.032           | 0.606           | -0.515          | -0.133          | 0.382           | -0.325          | -0.439          | -0.115          | -0.186          | -0.142          | 0.044           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.421          | 1.059           | 1.480           | -0.253          | 0.196           | 0.448           | 0.031           | -0.638          | -0.668          | 0.322           | -0.095          | -0.417          | -0.065          | 0.043           | 0.108           | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(a) BVW - Continued

| x/c                       | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 2.228      α = -03.75 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.617           | 0.258           | -0.359          | 0.093           | 0.283           | 0.190           | 0.105           | 0.379           | 0.274           | 0.068           | 0.336           | 0.267           | 0.104           | 0.201           | 0.097           | 0.0000 |
| 0.0250                    | 0.204           | 0.225           | 0.022           | 0.010           | 0.228           | 0.218           | 0.024           | 0.280           | 0.256           | 0.013           | 0.257           | 0.244           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.045          | 0.192           | 0.237           | -0.043          | 0.187           | 0.231           | -0.029          | 0.209           | 0.238           | -0.025          | 0.202           | 0.227           | 0.006           | 0.188           | 0.181           | 0.0500 |
| 0.1000                    | -0.049          | 0.120           | 0.170           | -0.060          | 0.144           | 0.204           | -0.052          | 0.148           | 0.201           | -0.051          | 0.164           | 0.215           | -0.046          | 0.172           | 0.217           | 0.1000 |
| 0.1500                    | -0.072          | 0.090           | 0.162           | -0.070          | 0.119           | 0.189           | -0.062          | 0.123           | 0.185           | -0.062          | 0.142           | 0.203           | -0.052          | 0.153           | 0.205           | 0.1500 |
| 0.2000                    | -0.067          | 0.089           | 0.156           | -0.078          | 0.097           | 0.175           | -0.077          | 0.105           | 0.181           | -0.070          | 0.123           | 0.193           | -0.059          | 0.130           | 0.189           | 0.2000 |
| 0.3000                    | -0.065          | 0.059           | 0.124           | -0.082          | 0.075           | 0.157           | -0.086          | 0.080           | 0.166           | -0.076          | 0.091           | 0.167           | -0.066          | 0.100           | 0.166           | 0.3000 |
| 0.4000                    | -0.062          | 0.058           | 0.120           | -0.085          | 0.052           | 0.137           | -0.093          | 0.064           | 0.157           | -0.082          | 0.071           | 0.152           | -0.074          | 0.080           | 0.155           | 0.4000 |
| 0.5000                    | -0.063          | 0.049           | 0.112           | -0.079          | 0.042           | 0.121           | -0.097          | 0.051           | 0.148           | -0.091          | 0.056           | 0.147           | -0.079          | 0.064           | 0.143           | 0.5000 |
| 0.6000                    | -0.065          | 0.037           | 0.102           | -0.036          | 0.035           | 0.071           | -0.096          | 0.041           | 0.138           | -0.095          | 0.046           | 0.141           | -0.083          |                 | 0.6000          |        |
| 0.7000                    | -0.065          | 0.024           | 0.088           | -0.084          | 0.028           | 0.112           | -0.093          | 0.033           |                 | -0.095          | 0.034           | 0.129           | -0.086          |                 | 0.7000          |        |
| 0.8000                    | -0.063          | 0.010           | 0.074           | -0.075          | 0.015           | 0.090           | -0.105          | 0.013           | 0.118           | -0.093          | 0.012           | 0.105           |                 |                 | 0.8000          |        |
| 1.0000                    | -0.057          | -0.015          | 0.042           | 0.110           | -0.031          | -0.142          | -0.128          | -0.062          | 0.066           | -0.083          | -0.057          | 0.026           | -0.092          | 0.060           | 0.152           | 1.0000 |
| M = 2.232      α = 00.30  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.648           | 0.102           | -0.545          | 0.058           | 0.078           | 0.020           | 0.065           | 0.253           | 0.189           | 0.074           | 0.232           | 0.158           | 0.081           | 0.115           | 0.034           | 0.0000 |
| 0.0250                    | 0.220           | 0.101           | -0.119          | -0.003          | 0.091           | 0.094           | 0.001           | 0.172           | 0.171           | 0.007           | 0.164           | 0.157           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.042          | 0.091           | 0.132           | -0.043          | 0.092           | 0.135           | -0.041          | 0.114           | 0.154           | -0.038          | 0.116           | 0.155           | -0.009          | 0.104           | 0.113           | 0.0500 |
| 0.1000                    | -0.068          | 0.041           | 0.109           | -0.061          | 0.062           | 0.123           | -0.060          | 0.066           | 0.126           | -0.061          | 0.083           | 0.144           | -0.059          | 0.090           | 0.148           | 0.1000 |
| 0.1500                    | -0.082          | 0.018           | 0.100           | -0.071          | 0.028           | 0.099           | -0.071          | 0.049           | 0.119           | -0.071          | 0.062           | 0.132           | -0.067          | 0.073           | 0.139           | 0.1500 |
| 0.2000                    | -0.082          | 0.008           | 0.089           | -0.085          | 0.015           | 0.100           | -0.078          | 0.033           | 0.111           | -0.081          | 0.048           | 0.130           | -0.073          | 0.057           | 0.130           | 0.2000 |
| 0.3000                    | -0.083          | -0.005          | 0.078           | -0.096          | 0.002           | 0.099           | -0.095          | 0.008           | 0.103           | -0.085          | 0.020           | 0.106           | -0.079          | 0.035           | 0.114           | 0.3000 |
| 0.4000                    | -0.082          | -0.015          | 0.067           | -0.096          | -0.020          | 0.076           | -0.103          | -0.006          | 0.096           | -0.092          | 0.004           | 0.096           | -0.085          | 0.020           | 0.105           | 0.4000 |
| 0.5000                    | -0.088          | -0.014          | 0.074           | -0.096          | -0.021          | 0.075           | -0.110          | -0.008          | 0.101           | -0.099          | -0.001          | 0.098           | -0.090          | 0.015           | 0.106           | 0.5000 |
| 0.6000                    | -0.090          | -0.026          | 0.064           | -0.049          | -0.023          | 0.026           | -0.109          | -0.018          | 0.091           | -0.104          | -0.009          | 0.095           | -0.095          |                 | 0.6000          |        |
| 0.7000                    | -0.090          | -0.037          | 0.053           | -0.098          | -0.027          | 0.071           | -0.105          | -0.028          | 0.065           | -0.105          | -0.022          | 0.083           | -0.097          |                 | 0.7000          |        |
| 0.8000                    | -0.088          | -0.039          | 0.049           | -0.096          | -0.043          | 0.053           | -0.105          | -0.040          | 0.065           | -0.103          | -0.036          | 0.067           |                 |                 | 0.8000          |        |
| 1.0000                    | -0.079          | -0.018          | 0.061           | 0.057           | -0.114          | -0.170          | -0.095          | -0.069          | 0.026           | -0.086          | -0.062          | 0.024           | -0.090          | 0.141           | 0.232           | 1.0000 |
| M = 2.232      α = 04.36  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.591           | 0.019           | -0.572          | 0.102           | -0.037          | -0.139          | 0.076           | 0.157           | 0.081           | 0.059           | 0.131           | 0.072           | 0.066           | 0.037           | -0.030          | 0.0000 |
| 0.0250                    | 0.198           | 0.013           | -0.185          | 0.015           | 0.003           | -0.012          | -0.001          | 0.081           | 0.083           | -0.002          | 0.074           | 0.076           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.046          | 0.004           | 0.051           | -0.040          | 0.021           | 0.060           | -0.050          | 0.030           | 0.080           | -0.044          | 0.034           | 0.078           | -0.022          | 0.029           | 0.052           | 0.0500 |
| 0.1000                    | -0.090          | -0.020          | 0.069           | -0.055          | -0.013          | 0.042           | -0.064          | -0.003          | 0.061           | -0.069          | 0.006           | 0.075           | -0.071          | 0.019           | 0.090           | 0.1000 |
| 0.1500                    | -0.098          | -0.047          | 0.052           | -0.071          | -0.029          | 0.042           | -0.070          | -0.018          | 0.052           | -0.080          | -0.006          | 0.074           | -0.079          | 0.006           | 0.085           | 0.1500 |
| 0.2000                    | -0.098          | -0.052          | 0.047           | -0.084          | -0.041          | 0.043           | -0.084          | -0.033          | 0.052           | -0.089          | -0.017          | 0.072           | -0.083          | -0.006          | 0.077           | 0.2000 |
| 0.3000                    | -0.100          | -0.058          | 0.042           | -0.104          | -0.049          | 0.035           | -0.095          | -0.051          | 0.043           | -0.094          | -0.041          | 0.053           | -0.089          | -0.020          | 0.069           | 0.3000 |
| 0.4000                    | -0.101          | -0.060          | 0.041           | -0.106          | -0.067          | 0.039           | -0.105          | -0.061          | 0.044           | -0.101          | -0.049          | 0.052           | -0.094          | -0.034          | 0.060           | 0.4000 |
| 0.5000                    | -0.107          | -0.062          | 0.045           | -0.107          | -0.069          | 0.038           | -0.112          | -0.065          | 0.046           | -0.108          | -0.060          | 0.048           | -0.100          | -0.026          | 0.073           | 0.5000 |
| 0.6000                    | -0.109          | -0.070          | 0.039           | -0.088          | -0.071          | 0.018           | -0.116          | -0.070          | 0.046           | -0.113          | -0.061          | 0.053           | -0.104          |                 | 0.6000          |        |
| 0.7000                    | -0.108          | -0.076          | 0.032           | -0.103          | -0.074          | 0.030           | -0.116          | -0.077          | 0.029           | -0.116          | -0.072          | 0.045           | -0.107          |                 | 0.7000          |        |
| 0.8000                    | -0.105          | -0.080          | 0.025           | -0.116          | -0.081          | 0.034           | -0.115          | -0.086          | 0.029           | -0.113          | -0.080          | 0.033           |                 |                 | 0.8000          |        |
| 1.0000                    | -0.093          | -0.081          | 0.013           | -0.133          | -0.112          | 0.021           | -0.101          | -0.107          | -0.007          | -0.086          | -0.088          | -0.002          | -0.104          | 0.332           | 0.436           | 1.0000 |
| M = 2.229      α = 08.31  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.128           | -0.181          | -0.309          | 0.082           | -0.063          | -0.146          | 0.067           | -0.125          | -0.191          | 0.060           | 0.047           | -0.013          | 0.060           | -0.035          | -0.095          | 0.0000 |
| 0.0250                    | 0.040           | -0.117          | -0.156          | 0.003           | -0.072          | -0.075          | 0.006           | -0.074          | -0.080          | 0.003           | -0.007          | -0.011          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.027          | -0.078          | -0.051          | -0.050          | -0.080          | -0.030          | -0.035          | -0.049          | -0.014          | -0.036          | -0.043          | -0.007          | -0.023          | -0.043          | -0.020          | 0.0500 |
| 0.1000                    | -0.097          | -0.079          | 0.018           | -0.073          | -0.090          | -0.017          | -0.060          | -0.074          | -0.014          | -0.064          | -0.062          | 0.002           | -0.069          | -0.050          | 0.019           | 0.1000 |
| 0.1500                    | -0.119          | -0.080          | 0.040           | -0.083          | -0.091          | -0.008          | -0.075          | -0.083          | -0.008          | -0.074          | -0.074          | 0.001           | -0.076          | -0.055          | 0.021           | 0.1500 |
| 0.2000                    | -0.131          | -0.077          | 0.054           | -0.094          | -0.090          | 0.004           | -0.088          | -0.090          | -0.002          | -0.085          | -0.078          | 0.006           | -0.082          | -0.062          | 0.020           | 0.2000 |
| 0.3000                    | -0.140          | -0.076          | 0.064           | -0.107          | -0.092          | 0.016           | -0.102          | -0.094          | 0.008           | -0.092          | -0.089          | 0.003           | -0.088          | -0.074          | 0.014           | 0.3000 |
| 0.4000                    | -0.150          | -0.087          | 0.064           | -0.123          | -0.094          | 0.029           | -0.113          | -0.098          | 0.015           | -0.101          | -0.099          | 0.002           | -0.095          | -0.085          | 0.010           | 0.4000 |
| 0.5000                    | -0.149          | -0.097          | 0.052           | -0.135          | -0.098          | 0.037           | -0.120          | -0.099          | 0.021           | -0.110          | -0.103          | 0.007           | -0.102          | -0.031          | 0.070           | 0.5000 |
| 0.6000                    | -0.142          | -0.103          | 0.040           | -0.100          | -0.103          | -0.003          | -0.133          | -0.098          | 0.035           | -0.117          | -0.096          | 0.020           | -0.106          |                 | 0.6000          |        |
| 0.7000                    | -0.141          | -0.108          | 0.033           | -0.149          | -0.107          | 0.042           | -0.104          | -0.104          | 0.029           | -0.120          | -0.102          | 0.017           | -0.110          |                 | 0.7000          |        |
| 0.8000                    | -0.137          | -0.106          | 0.031           | -0.147          | -0.112          | 0.036           | -0.043          | -0.113          | -0.070          | -0.120          | -0.109          | 0.011           |                 |                 | 0.8000          |        |
| 1.0000                    | -0.116          | -0.077          | 0.040           | -0.149          | -0.119          | 0.030           | 0.060           | -0.145          | -0.205          | -0.113          | -0.122          | -0.009          | -0.116          | 0.330           | 0.446           | 1.0000 |



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TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$

| x/c                       | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 0.699      α = -04.10 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 1.310           | 0.327           | -0.984          | -0.971          | 0.329           | 1.301           | -0.831          | 0.463           | 1.293           | -0.684          | 0.448           | 1.132           | -0.603          | 0.204           | 0.807           | 0.0000 |
| 0.0250                    | 0.125           | 0.264           | 0.139           | -0.916          | 0.239           | 1.154           | -0.853          | 0.323           | 1.176           | -0.687          | 0.305           | 0.992           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.550          | 0.208           | 0.758           | -0.813          | 0.174           | 0.986           | -0.840          | 0.222           | 1.061           | -0.689          | 0.208           | 0.897           | -0.559          | 0.180           | 0.740           | 0.0500 |
| 0.1000                    | -0.368          | 0.119           | 0.487           | -0.463          | 0.121           | 0.585           | -0.704          | 0.135           | 0.840           | -0.687          | 0.152           | 0.839           | -0.531          | 0.152           | 0.683           | 0.1000 |
| 0.1500                    | -0.326          | 0.087           | 0.413           | -0.325          | 0.091           | 0.416           | -0.542          | 0.099           | 0.642           | -0.655          | 0.108           | 0.763           | -0.518          | 0.119           | 0.638           | 0.1500 |
| 0.2000                    | -0.297          | 0.067           | 0.364           | -0.274          | 0.071           | 0.344           | -0.430          | 0.070           | 0.430           | -0.616          | 0.083           | 0.698           | -0.504          | 0.075           | 0.578           | 0.2000 |
| 0.3000                    | -0.277          | 0.031           | 0.308           | -0.217          | 0.037           | 0.255           | -0.213          | 0.046           | 0.259           | -0.472          | 0.048           | 0.520           | -0.467          | 0.048           | 0.515           | 0.3000 |
| 0.4000                    | -0.226          | 0.008           | 0.233           | -0.169          | 0.022           | 0.191           | -0.166          | 0.027           | 0.193           | -0.239          | 0.028           | 0.267           | -0.387          | 0.027           | 0.413           | 0.4000 |
| 0.5000                    | -0.156          | 0.005           | 0.161           | -0.128          | 0.021           | 0.149           | -0.126          | 0.026           | 0.152           | -0.173          | 0.020           | 0.193           | -0.326          | 0.022           | 0.348           | 0.5000 |
| 0.6000                    | -0.107          | 0.014           | 0.121           | -0.091          | 0.021           | 0.112           | -0.089          | 0.020           | 0.109           | -0.080          | 0.006           | 0.086           | -0.240          |                 | 0.6000          |        |
| 0.7000                    | -0.078          | 0.023           | 0.100           | -0.065          | 0.017           | 0.082           |                 | -0.003          |                 | -0.050          | -0.004          | 0.045           | -0.131          |                 | 0.7000          |        |
| 0.8000                    | -0.045          | 0.021           | 0.066           | -0.027          | 0.007           | 0.034           | -0.022          | -0.008          | 0.015           | -0.036          | -0.002          | 0.035           |                 |                 | 0.8000          |        |
| 1.0000                    | 0.034           | -0.010          | -0.044          | 0.090           | -0.031          | -0.121          | 0.034           | 0.040           | 0.006           | -0.058          | 0.043           | 0.101           | 0.330           | 0.251           | -0.079          | 1.0000 |
| M = 0.700      α = -00.05 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.156           | -0.014          | -0.170          | -0.525          | -0.006          | 0.519           | -1.170          | 0.350           | 1.520           | -1.193          | 0.293           | 1.486           | -1.219          | 0.119           | 1.338           | 0.0000 |
| 0.0250                    | -0.007          | 0.021           | 0.027           | -0.533          | 0.028           | 0.561           | -0.747          | 0.183           | 0.930           | -0.842          | 0.193           | 1.035           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.146          | 0.028           | 0.174           | -0.507          | 0.040           | 0.547           | -0.470          | 0.076           | 0.547           | -0.584          | 0.123           | 0.707           | -0.691          | 0.093           | 0.784           | 0.0500 |
| 0.1000                    | -0.352          | -0.035          | 0.316           | -0.352          | -0.004          | 0.348           | -0.358          | 0.043           | 0.401           | -0.348          | 0.069           | 0.417           | -0.382          | 0.067           | 0.449           | 0.1000 |
| 0.1500                    | -0.292          | -0.044          | 0.248           | -0.293          | -0.022          | 0.272           | -0.291          | 0.010           | 0.301           | -0.326          | 0.037           | 0.363           | -0.293          | 0.039           | 0.332           | 0.1500 |
| 0.2000                    | -0.268          | -0.057          | 0.211           | -0.272          | -0.034          | 0.238           | -0.247          | -0.006          | 0.241           | -0.274          | 0.023           | 0.297           | -0.254          | 0.019           | 0.273           | 0.2000 |
| 0.3000                    | -0.253          | -0.074          | 0.180           | -0.240          | -0.034          | 0.206           | -0.199          | -0.017          | 0.183           | -0.216          | 0.006           | 0.208           | -0.221          | 0.001           | 0.222           | 0.3000 |
| 0.4000                    | -0.208          | -0.073          | 0.136           | -0.175          | -0.044          | 0.131           | -0.155          | -0.023          | 0.132           | -0.169          | -0.015          | 0.154           | -0.182          | 0.008           | 0.174           | 0.4000 |
| 0.5000                    | -0.157          | -0.066          | 0.091           | -0.153          | -0.036          | 0.117           | -0.126          | -0.023          | 0.103           | -0.138          | -0.020          | 0.118           | -0.144          | -0.008          | 0.136           | 0.5000 |
| 0.6000                    | -0.110          | -0.045          | 0.065           | -0.117          | -0.026          | 0.091           | -0.093          | -0.025          | 0.068           | -0.115          | -0.024          | 0.091           | -0.110          |                 | 0.6000          |        |
| 0.7000                    | -0.065          | -0.013          | 0.052           | -0.085          | -0.020          | 0.065           | -0.029          |                 | 0.029           | -0.081          | -0.031          | 0.051           | -0.095          |                 | 0.7000          |        |
| 0.8000                    | -0.041          | -0.008          | 0.033           | -0.060          | -0.022          | 0.037           | -0.034          | -0.034          | 0.001           | -0.060          | -0.027          | 0.034           |                 |                 | 0.8000          |        |
| 1.0000                    | -0.062          | -0.080          | -0.018          | -0.030          | -0.055          | -0.025          | 0.014           | -0.047          | -0.061          | -0.056          | 0.014           | 0.070           | -0.168          | 0.139           | 0.307           | 1.0000 |
| M = 0.699      α = 03.96  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 1.272           | 0.093           | -1.178          | -0.553          | 0.047           | 0.600           | -0.414          | 0.142           | 0.556           | -0.398          | 0.087           | 0.485           | -0.514          | -0.118          | 0.396           | 0.0000 |
| 0.0250                    | 0.137           | 0.091           | -0.046          | -0.455          | -0.010          | 0.446           | -0.374          | 0.037           | 0.411           | -0.370          | 0.041           | 0.411           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.525          | 0.077           | 0.602           | -0.382          | -0.051          | 0.332           | -0.335          | -0.028          | 0.307           | -0.340          | 0.007           | 0.347           | -0.329          | -0.036          | 0.293           | 0.0500 |
| 0.1000                    | -0.432          | 0.013           | 0.445           | -0.309          | -0.084          | 0.225           | -0.263          | -0.040          | 0.223           | -0.276          | -0.025          | 0.251           | -0.236          | -0.004          | 0.232           | 0.1000 |
| 0.1500                    | -0.374          | -0.023          | 0.351           | -0.273          | -0.095          | 0.179           | -0.220          | -0.053          | 0.167           | -0.218          | -0.037          | 0.181           | -0.235          | -0.022          | 0.212           | 0.1500 |
| 0.2000                    | -0.334          | -0.043          | 0.291           | -0.251          | -0.101          | 0.150           | -0.199          | -0.060          | 0.140           | -0.193          | -0.046          | 0.146           | -0.194          | -0.035          | 0.159           | 0.2000 |
| 0.3000                    | -0.263          | -0.083          | 0.180           | -0.203          | -0.108          | 0.095           | -0.167          | -0.061          | 0.107           | -0.150          | -0.054          | 0.096           | -0.167          | -0.042          | 0.125           | 0.3000 |
| 0.4000                    | -0.214          | -0.081          | 0.133           | -0.159          | -0.106          | 0.053           | -0.133          | -0.058          | 0.075           | -0.134          | -0.053          | 0.081           | -0.151          | -0.043          | 0.108           | 0.4000 |
| 0.5000                    | -0.166          | -0.062          | 0.104           | -0.119          | -0.089          | 0.030           | -0.110          | -0.050          | 0.060           | -0.114          | -0.050          | 0.063           | -0.128          | -0.038          | 0.091           | 0.5000 |
| 0.6000                    | -0.102          | -0.038          | 0.064           | -0.086          | -0.073          | 0.013           | -0.083          | -0.044          | 0.038           | -0.090          | -0.050          | 0.040           | -0.101          |                 | 0.6000          |        |
| 0.7000                    | -0.056          | -0.015          | 0.041           | -0.064          | -0.079          | -0.015          | -0.037          | -0.042          |                 | -0.069          | -0.048          | 0.021           | -0.089          |                 | 0.7000          |        |
| 0.8000                    | -0.033          | -0.012          | 0.021           | -0.037          | -0.071          | -0.034          | -0.039          | -0.042          | -0.003          | -0.058          | -0.044          | 0.014           |                 |                 | 0.8000          |        |
| 1.0000                    | -0.058          | -0.063          | -0.004          | 0.035           | -0.011          | -0.045          | -0.009          | -0.046          | -0.037          | -0.063          | -0.031          | 0.032           | -0.142          | 0.100           | 0.242           | 1.0000 |
| M = 0.700      α = 07.96  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 2.357           | 0.029           | -2.327          | -1.127          | 0.179           | 1.307           | -0.602          | 0.066           | 0.668           | -0.424          | -0.002          | 0.422           | -0.204          | -0.107          | 0.097           | 0.0000 |
| 0.0250                    | 0.135           | 0.190           | -0.006          | -1.172          | 0.137           | 1.309           | -0.620          | 0.019           | 0.639           | -0.354          | 0.001           | 0.355           |                 |                 |                 | 0.0250 |
| 0.0500                    | -1.124          | 0.169           | 1.293           | -1.165          | 0.106           | 1.271           | -0.616          | -0.014          | 0.601           | -0.298          | -0.006          | 0.292           | -0.211          | -0.070          | 0.141           | 0.0500 |
| 0.1000                    | -0.757          | 0.066           | 0.823           | -0.996          | 0.076           | 1.072           | -0.539          | -0.041          | 0.499           | -0.226          | -0.043          | 0.183           | -0.198          | -0.053          | 0.145           | 0.1000 |
| 0.1500                    | -0.634          | 0.029           | 0.663           | -0.696          | 0.059           | 0.755           | -0.465          | -0.066          | 0.399           | -0.201          | -0.059          | 0.142           | -0.166          | -0.056          | 0.110           | 0.1500 |
| 0.2000                    | -0.547          | 0.008           | 0.555           | -0.370          | 0.032           | 0.402           | -0.388          | -0.091          | 0.298           | -0.181          | -0.063          | 0.118           | -0.153          | -0.058          | 0.095           | 0.2000 |
| 0.3000                    | -0.433          | -0.019          | 0.414           | -0.258          | 0.002           | 0.260           | -0.320          | -0.099          | 0.220           | -0.145          | -0.073          | 0.072           | -0.127          | -0.058          | 0.069           | 0.3000 |
| 0.4000                    | -0.325          | -0.023          | 0.302           | -0.190          | -0.027          | 0.163           | -0.234          | -0.109          | 0.125           | -0.130          | -0.076          | 0.054           | -0.112          | -0.056          | 0.056           | 0.4000 |
| 0.5000                    | -0.238          | -0.016          | 0.222           | -0.173          | -0.025          | 0.149           | -0.146          | -0.105          | 0.040           | -0.113          | -0.076          | 0.036           | -0.100          | -0.047          | 0.053           | 0.5000 |
| 0.6000                    | -0.151          | 0.001           | 0.152           | -0.123          | 0.013           | 0.109           | -0.104          | -0.100          | 0.004           | -0.091          | -0.076          | 0.015           | -0.078          |                 | 0.6000          |        |
| 0.7000                    | -0.088          | 0.008           | 0.096           | -0.073          | 0.017           | 0.056           | -0.056          | -0.101          |                 | -0.072          | -0.072          | 0.001           | -0.070          |                 | 0.7000          |        |
| 0.8000                    | -0.055          | 0.010           | 0.065           | -0.028          | -0.019          | 0.009           | -0.053          | -0.100          | -0.047          | -0.065          | -0.066          | -0.001          |                 |                 | 0.8000          |        |
| 1.0000                    | -0.080          | -0.006          | 0.074           | 0.048           | -0.018          | -0.066          | -0.047          | -0.093          | -0.046          | -0.081          | -0.047          | 0.034           | -0.135          | 0.109           | 0.244           | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Continued

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| x/c                       | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 0.698      α = 12.01° |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 3.132           | 0.354           | -2.779          | -1.276          | 0.173           | 1.449           | -0.845          | 0.339           | 1.184           | -0.440          | -0.085          | 0.356           | -0.239          | -0.170          | 0.070           | 0.0000 |
| 0.0250                    | 0.100           | 0.287           | 0.187           | -1.267          | 0.180           | 1.446           | -0.844          | 0.144           | 0.988           | -0.526          | -0.063          | 0.463           |                 |                 |                 | 0.0250 |
| 0.0500                    | -1.696          | 0.223           | 1.919           | -1.250          | 0.170           | 1.419           | -0.839          | 0.037           | 0.876           | -0.574          | -0.057          | 0.517           | -0.286          | -0.111          | 0.175           | 0.0500 |
| 0.1000                    | -1.579          | 0.102           | 1.681           | -1.190          | 0.102           | 1.292           | -0.821          | 0.081           | 0.903           | -0.560          | -0.094          | 0.466           | -0.287          | -0.098          | 0.189           | 0.1000 |
| 0.1500                    | -1.565          | 0.055           | 1.620           | -1.107          | 0.075           | 1.182           | -0.777          | 0.068           | 0.845           | -0.527          | -0.106          | 0.421           | -0.241          | -0.129          | 0.112           | 0.1500 |
| 0.2000                    | -1.473          | 0.032           | 1.505           | -0.994          | 0.053           | 1.047           | -0.724          | 0.037           | 0.760           | -0.490          | -0.120          | 0.371           | -0.215          | -0.132          | 0.083           | 0.2000 |
| 0.3000                    | -0.957          | -0.003          | 0.954           | -0.778          | 0.024           | 0.803           | -0.588          | 0.005           | 0.593           | -0.410          | -0.145          | 0.265           | -0.196          | -0.136          | 0.061           | 0.3000 |
| 0.4000                    | -0.559          | -0.016          | 0.543           | -0.583          |                 | 0.583           | -0.436          | -0.023          | 0.412           | -0.327          | -0.148          | 0.178           | -0.176          | -0.141          | 0.035           | 0.4000 |
| 0.5000                    | -0.351          | -0.016          | 0.335           | -0.407          | -0.004          | 0.403           | -0.316          | -0.023          | 0.293           | -0.234          | -0.159          | 0.075           | -0.159          | -0.139          | 0.020           | 0.5000 |
| 0.6000                    | -0.237          | -0.004          | 0.233           | -0.293          | -0.003          | 0.290           | -0.237          | 0.039           | 0.198           | -0.174          | -0.179          | -0.006          | -0.140          |                 |                 | 0.6000 |
| 0.7000                    | -0.173          | 0.001           | 0.174           | -0.216          | -0.024          | 0.192           | -0.163          |                 |                 | -0.137          | -0.158          | -0.020          | -0.123          |                 |                 | 0.7000 |
| 0.8000                    | -0.085          | -0.002          | 0.083           | -0.153          | -0.038          | 0.115           | -0.133          | -0.072          | 0.061           | -0.116          | -0.153          | -0.037          |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.162           | -0.035          | -0.197          | -0.075          | -0.050          | 0.025           | -0.102          | -0.045          | 0.057           | -0.117          | -0.191          | -0.074          | -0.082          | -0.004          | 0.077           | 1.0000 |
| M = 0.700      α = 15.87° |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 3.041           | 0.542           | -2.499          | -1.169          | 0.286           | 1.455           | -0.925          | 0.433           | 1.358           | -0.781          | -0.397          | 0.385           | -0.594          | -0.167          | 0.427           | 0.0000 |
| 0.0250                    | 0.063           | 0.443           | 0.380           | -1.170          | 0.227           | 1.396           | -0.923          | 0.192           | 1.115           | -0.776          | -0.112          | 0.664           |                 |                 |                 | 0.0250 |
| 0.0500                    | -1.705          | 0.351           | 2.056           | -1.156          | 0.174           | 1.331           | -0.919          | 0.050           | 0.969           | -0.772          | 0.051           | 0.822           | -0.541          | -0.150          | 0.391           | 0.0500 |
| 0.1000                    | -1.613          | 0.189           | 1.802           | -1.090          | 0.090           | 1.180           | -0.905          | 0.067           | 0.973           | -0.765          | 0.009           | 0.774           | -0.496          | -0.155          | 0.341           | 0.1000 |
| 0.1500                    | -1.503          | 0.096           | 1.600           | -1.021          | 0.063           | 1.084           | -0.877          | 0.049           | 0.927           | -0.708          | -0.017          | 0.690           | -0.460          | -0.184          | 0.276           | 0.1500 |
| 0.2000                    | -1.411          | 0.049           | 1.460           | -0.954          | 0.030           | 0.984           | -0.804          | 0.023           | 0.828           | -0.661          | -0.039          | 0.622           | -0.419          | -0.196          | 0.224           | 0.2000 |
| 0.3000                    | -1.216          | -0.025          | 1.191           | -0.804          | -0.010          | 0.794           | -0.706          | -0.003          | 0.704           | -0.564          | -0.067          | 0.477           | -0.337          | -0.205          | 0.133           | 0.3000 |
| 0.4000                    | -0.976          | -0.050          | 0.926           | -0.713          | -0.043          | 0.670           | -0.554          | 0.026           | 0.519           | -0.451          | -0.085          | 0.366           | -0.299          | -0.219          | 0.080           | 0.4000 |
| 0.5000                    | -0.772          | -0.051          | 0.721           | -0.567          | -0.043          | 0.524           | -0.421          | 0.040           | 0.381           | -0.332          | -0.099          | 0.233           | -0.255          | -0.217          | 0.038           | 0.5000 |
| 0.6000                    | -0.623          | -0.049          | 0.574           | -0.441          | -0.046          | 0.394           | -0.335          | -0.069          | 0.266           | -0.270          | -0.125          | 0.145           | -0.216          |                 |                 | 0.6000 |
| 0.7000                    | -0.467          | -0.049          | 0.418           | -0.391          | -0.068          | 0.323           | -0.297          |                 |                 | -0.227          | -0.122          | 0.104           | -0.182          |                 |                 | 0.7000 |
| 0.8000                    | -0.383          | -0.063          | 0.319           | -0.310          | -0.101          | 0.209           | -0.187          | -0.120          | 0.067           | -0.186          | -0.126          | 0.060           |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.432          | -0.137          | 0.295           | -0.052          | -0.198          | -0.145          | -0.071          | -0.153          | -0.082          | -0.114          | -0.153          | -0.039          | -0.118          | 0.028           | 0.145           | 1.0000 |
| M = 1.304      α = 03.90° |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.025           | 0.272           | 0.247           | -0.350          | 0.230           | 0.581           | -0.509          | 0.363           | 0.872           | -0.448          | 0.363           | 0.811           | -0.432          | 0.114           | 0.546           | 0.0000 |
| 0.0250                    | -0.090          | 0.274           | 0.364           | -0.352          | 0.221           | 0.573           | -0.460          | 0.279           | 0.739           | -0.464          | 0.271           | 0.735           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.160          | 0.255           | 0.415           | -0.352          | 0.206           | 0.558           | -0.427          | 0.218           | 0.645           | -0.469          | 0.205           | 0.674           | -0.438          | 0.110           | 0.549           | 0.0500 |
| 0.1000                    | -0.170          | 0.151           | 0.320           | -0.342          | 0.159           | 0.501           | -0.407          | 0.167           | 0.574           | -0.441          | 0.157           | 0.598           | -0.435          | 0.097           | 0.532           | 0.1000 |
| 0.1500                    | -0.151          | 0.133           | 0.284           | -0.278          | 0.138           | 0.416           | -0.394          | 0.127           | 0.520           | -0.392          | 0.114           | 0.506           | -0.421          | 0.074           | 0.495           | 0.1500 |
| 0.2000                    | -0.124          | 0.127           | 0.251           | -0.171          | 0.109           | 0.281           | -0.369          | 0.114           | 0.483           | -0.388          | 0.068           | 0.456           | -0.394          | 0.050           | 0.445           | 0.2000 |
| 0.3000                    | -0.128          | 0.090           | 0.218           | -0.157          | 0.066           | 0.223           | -0.321          | 0.074           | 0.195           | -0.382          | 0.020           | 0.402           | -0.377          | 0.023           | 0.401           | 0.3000 |
| 0.4000                    | -0.140          | 0.058           | 0.197           | -0.153          | 0.034           | 0.187           | -0.357          | 0.034           | 0.171           | -0.273          | -0.004          | 0.269           | -0.371          | 0.002           | 0.373           | 0.4000 |
| 0.5000                    | -0.140          | 0.005           | 0.145           | -0.149          | 0.000           | 0.150           | -0.169          | 0.004           | 0.173           | -0.193          | 0.000           | 0.194           | -0.353          | -0.004          | 0.349           | 0.5000 |
| 0.6000                    | -0.127          | 0.015           | 0.142           | -0.135          | 0.003           | 0.138           | -0.167          | 0.004           | 0.171           | -0.176          | -0.016          | 0.160           | -0.273          |                 |                 | 0.6000 |
| 0.7000                    | -0.105          | -0.004          | 0.101           | -0.128          | -0.002          | 0.126           | -0.163          | -0.023          |                 | -0.158          | -0.037          | 0.121           | -0.184          |                 |                 | 0.7000 |
| 0.8000                    | -0.005          | -0.039          | -0.034          | -0.106          | -0.045          | 0.062           | -0.115          | -0.066          | 0.049           | -0.141          | -0.077          | 0.064           |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.427           | -0.156          | -0.583          | -0.017          | -0.245          | -0.228          | -0.002          | -0.200          | -0.202          | -0.112          | -0.216          | -0.104          | 0.150           | 0.204           | 0.054           | 1.0000 |
| M = 1.301      α = 00.15° |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.154          | -0.020          | 0.134           | -0.194          | 0.079           | 0.273           | -0.344          | 0.242           | 0.587           | -0.333          | 0.162           | 0.495           | -0.384          | 0.010           | 0.393           | 0.0000 |
| 0.0250                    | -0.158          | 0.061           | 0.219           | -0.248          | 0.059           | 0.306           | -0.364          | 0.135           | 0.499           | -0.372          | 0.103           | 0.475           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.163          | 0.095           | 0.258           | -0.275          | 0.042           | 0.317           | -0.363          | 0.067           | 0.430           | -0.385          | 0.061           | 0.446           | -0.381          | 0.018           | 0.399           | 0.0500 |
| 0.1000                    | -0.172          | 0.025           | 0.197           | -0.249          | 0.021           | 0.270           | -0.300          | 0.051           | 0.351           | -0.390          | 0.026           | 0.356           | -0.372          | 0.009           | 0.380           | 0.1000 |
| 0.1500                    | -0.164          | -0.010          | 0.154           | -0.222          | 0.008           | 0.229           | -0.269          | 0.018           | 0.287           | -0.318          | -0.005          | 0.313           | -0.356          | -0.019          | 0.337           | 0.1500 |
| 0.2000                    | -0.167          | -0.009          | 0.158           | -0.206          | -0.012          | 0.194           | -0.246          | -0.007          | 0.239           | -0.289          | -0.027          | 0.285           | -0.345          | -0.049          | 0.296           | 0.2000 |
| 0.3000                    | -0.155          | -0.030          | 0.125           | -0.176          | -0.029          | 0.147           | -0.204          | -0.034          | 0.170           | -0.289          | -0.051          | 0.238           | -0.331          | -0.093          | 0.239           | 0.3000 |
| 0.4000                    | -0.171          | -0.057          | 0.114           | -0.175          | -0.051          | 0.124           | -0.199          | -0.061          | 0.138           | -0.227          | -0.104          | 0.123           | -0.314          | -0.107          | 0.207           | 0.4000 |
| 0.5000                    | -0.165          | -0.090          | 0.075           | -0.177          | -0.093          | 0.084           | -0.204          | -0.078          | 0.126           | -0.213          | -0.105          | 0.108           | -0.240          | -0.100          | 0.140           | 0.5000 |
| 0.6000                    | -0.154          | -0.101          | 0.053           | -0.173          | -0.099          | 0.074           | -0.203          | -0.093          | 0.110           | -0.212          | -0.104          | 0.107           | -0.187          |                 |                 | 0.6000 |
| 0.7000                    | -0.155          | -0.077          | 0.078           | -0.180          | -0.094          | 0.086           | -0.195          | -0.105          |                 | -0.188          | -0.111          | 0.077           | -0.190          |                 |                 | 0.7000 |
| 0.8000                    | -0.105          | -0.088          | 0.017           | -0.139          | -0.085          | 0.054           | -0.150          | -0.098          | 0.052           | -0.165          | -0.110          | 0.055           |                 |                 |                 | 0.8000 |
| 1.0000                    | 0.148           | -0.215          | -0.363          | 0.089           | -0.054          | -0.143          | -0.029          | -0.028          | 0.001           | -0.124          | -0.089          | 0.036           | -0.534          | 0.264           | 0.798           | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 5.3° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Continued

| x/c                      | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 1.301      α = 04.11 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.060          | 0.124           | 0.185           | -0.359          | -0.002          | 0.357           | -0.201          | -0.021          | 0.181           | -0.204          | -0.016          | 0.188           | -0.283          | -0.193          | 0.090           | 0.0000 |
| 0.0250                   | -0.206          | 0.111           | 0.317           | -0.350          | -0.020          | 0.330           | -0.236          | -0.053          | 0.183           | -0.247          | -0.045          | 0.201           | -0.306          | -0.126          | 0.180           | 0.0250 |
| 0.0500                   | -0.297          | 0.089           | 0.387           | -0.336          | -0.036          | 0.300           | -0.253          | -0.074          | 0.179           | -0.275          | -0.068          | 0.207           | -0.306          | -0.126          | 0.180           | 0.0500 |
| 0.1000                   | -0.317          | 0.019           | 0.336           | -0.293          | -0.062          | 0.232           | -0.232          | -0.081          | 0.151           | -0.290          | -0.095          | 0.195           | -0.312          | -0.102          | 0.210           | 0.1000 |
| 0.1500                   | -0.278          | 0.009           | 0.288           | -0.249          | -0.079          | 0.169           | -0.222          | -0.096          | 0.126           | -0.261          | -0.109          | 0.151           | -0.299          | -0.119          | 0.179           | 0.1500 |
| 0.2000                   | -0.267          | -0.001          | 0.267           | -0.224          | -0.100          | 0.086           | -0.220          | -0.101          | 0.094           | -0.255          | -0.123          | 0.132           | -0.278          | -0.142          | 0.135           | 0.2000 |
| 0.3000                   | -0.257          | -0.049          | 0.209           | -0.211          | -0.125          | 0.049           | -0.220          | -0.126          | 0.094           | -0.250          | -0.138          | 0.112           | -0.267          | -0.148          | 0.118           | 0.3000 |
| 0.4000                   | -0.251          | -0.094          | 0.157           | -0.207          | -0.158          | 0.049           | -0.231          | -0.146          | 0.085           | -0.242          | -0.155          | 0.087           | -0.254          | -0.159          | 0.082           | 0.4000 |
| 0.5000                   | -0.233          | -0.153          | 0.080           | -0.221          | -0.168          | 0.052           | -0.240          | -0.154          | 0.086           | -0.248          | -0.174          | 0.074           | -0.246          | -0.164          | 0.082           | 0.5000 |
| 0.6000                   | -0.201          | -0.140          | 0.061           | -0.212          | -0.180          | 0.032           | -0.233          | -0.158          | 0.076           | -0.232          | -0.169          | 0.063           | -0.247          | -0.164          | 0.080           | 0.6000 |
| 0.7000                   | -0.197          | -0.155          | 0.042           | -0.214          | -0.179          | 0.035           | -0.217          | -0.159          | 0.058           | -0.217          | -0.159          | 0.058           | -0.229          | -0.159          | 0.070           | 0.7000 |
| 0.8000                   | -0.093          | -0.088          | 0.005           | -0.106          | -0.120          | -0.014          | -0.160          | -0.131          | 0.029           | -0.204          | -0.131          | 0.072           | -0.069          | -0.119          | -0.049          | 0.8000 |
| 1.0000                   | 0.420           | 0.297           | -0.124          | 0.436           | 0.167           | -0.270          | -0.007          | -0.018          | -0.011          | -0.182          | -0.022          | 0.160           | -0.069          | -0.119          | -0.049          | 1.0000 |
| M = 1.304      α = 08.01 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.140           | 0.107           | -0.033          | -0.509          | -0.039          | 0.471           | -0.511          | -0.195          | 0.316           | -0.228          | -0.152          | 0.076           | -0.161          | -0.263          | -0.103          | 0.0000 |
| 0.0250                   | -0.207          | 0.053           | 0.260           | -0.510          | -0.014          | 0.496           | -0.511          | -0.130          | 0.381           | -0.286          | -0.161          | 0.124           | -0.221          | -0.235          | -0.014          | 0.0250 |
| 0.0500                   | -0.408          | 0.012           | 0.420           | -0.510          | -0.003          | 0.507           | -0.498          | -0.092          | 0.406           | -0.316          | -0.167          | 0.149           | -0.221          | -0.235          | -0.014          | 0.0500 |
| 0.1000                   | -0.374          | -0.032          | 0.342           | -0.504          | -0.020          | 0.484           | -0.436          | -0.096          | 0.340           | -0.298          | -0.171          | 0.126           | -0.246          | -0.219          | 0.028           | 0.1000 |
| 0.1500                   | -0.350          | -0.059          | 0.291           | -0.431          | -0.029          | 0.401           | -0.387          | -0.129          | 0.258           | -0.279          | -0.171          | 0.108           | -0.237          | -0.215          | 0.023           | 0.1500 |
| 0.2000                   | -0.343          | -0.073          | 0.271           | -0.376          | -0.062          | 0.314           | -0.300          | -0.164          | 0.136           | -0.258          | -0.179          | 0.078           | -0.229          | -0.221          | 0.008           | 0.2000 |
| 0.3000                   | -0.329          | -0.078          | 0.251           | -0.334          | -0.085          | 0.249           | -0.277          | -0.185          | 0.093           | -0.241          | -0.210          | 0.030           | -0.223          | -0.225          | -0.002          | 0.3000 |
| 0.4000                   | -0.347          | -0.104          | 0.243           | -0.323          | -0.115          | 0.209           | -0.274          | -0.221          | 0.053           | -0.242          | -0.225          | 0.017           | -0.235          | -0.217          | 0.018           | 0.4000 |
| 0.5000                   | -0.339          | -0.140          | 0.199           | -0.322          | -0.157          | 0.165           | -0.280          | -0.232          | 0.047           | -0.252          | -0.218          | 0.039           | -0.240          | -0.198          | 0.051           | 0.5000 |
| 0.6000                   | -0.309          | -0.142          | 0.167           | -0.310          | -0.167          | 0.143           | -0.280          | -0.239          | 0.041           | -0.267          | -0.203          | 0.065           | -0.252          | -0.198          | 0.050           | 0.6000 |
| 0.7000                   | -0.293          | -0.140          | 0.153           | -0.285          | -0.165          | 0.120           | -0.229          | -0.229          | 0.041           | -0.256          | -0.175          | 0.081           | -0.227          | -0.175          | 0.070           | 0.7000 |
| 0.8000                   | -0.137          | -0.064          | 0.073           | -0.136          | -0.126          | 0.010           | -0.138          | -0.180          | -0.042          | -0.216          | -0.125          | 0.091           | -0.072          | -0.125          | 0.080           | 0.8000 |
| 1.0000                   | 0.330           | 0.306           | -0.024          | 0.531           | 0.061           | -0.470          | 0.193           | 0.039           | -0.155          | -0.048          | 0.043           | 0.091           | 0.017           | 0.064           | 0.047           | 1.0000 |
| M = 1.302      α = 12.16 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.535           | 0.193           | -0.341          | -0.383          | 0.014           | 0.307           | -0.136          | -0.270          | -0.134          | -0.460          | -0.263          | 0.197           | -0.219          | -0.296          | -0.077          | 0.0000 |
| 0.0250                   | -0.131          | 0.114           | -0.245          | -0.444          | -0.033          | 0.400           | -0.351          | -0.129          | 0.222           | -0.463          | -0.200          | 0.262           | -0.265          | -0.276          | -0.010          | 0.0250 |
| 0.0500                   | -0.534          | 0.054           | 0.588           | -0.478          | -0.066          | 0.402           | -0.476          | -0.052          | 0.424           | -0.461          | -0.166          | 0.294           | -0.265          | -0.276          | -0.010          | 0.0500 |
| 0.1000                   | -0.550          | -0.010          | 0.540           | -0.470          | -0.088          | 0.302           | -0.457          | -0.093          | 0.363           | -0.443          | -0.187          | 0.256           | -0.288          | -0.267          | 0.021           | 0.1000 |
| 0.1500                   | -0.536          | -0.057          | 0.479           | -0.457          | -0.100          | 0.307           | -0.429          | -0.127          | 0.301           | -0.400          | -0.207          | 0.192           | -0.288          | -0.270          | 0.018           | 0.1500 |
| 0.2000                   | -0.512          | -0.087          | 0.425           | -0.455          | -0.110          | 0.306           | -0.418          | -0.141          | 0.277           | -0.388          | -0.219          | 0.169           | -0.285          | -0.286          | -0.001          | 0.2000 |
| 0.3000                   | -0.489          | -0.125          | 0.364           | -0.466          | -0.145          | 0.301           | -0.424          | -0.152          | 0.272           | -0.373          | -0.246          | 0.128           | -0.286          | -0.298          | -0.012          | 0.3000 |
| 0.4000                   | -0.483          | -0.151          | 0.331           | -0.475          | -0.168          | 0.307           | -0.432          | -0.152          | 0.240           | -0.359          | -0.285          | 0.074           | -0.294          | -0.305          | -0.010          | 0.4000 |
| 0.5000                   | -0.466          | -0.178          | 0.289           | -0.474          | -0.201          | 0.203           | -0.436          | -0.215          | 0.221           | -0.367          | -0.283          | 0.084           | -0.306          | -0.297          | 0.009           | 0.5000 |
| 0.6000                   | -0.426          | -0.197          | 0.230           | -0.468          | -0.192          | 0.277           | -0.437          | -0.237          | 0.200           | -0.370          | -0.298          | 0.072           | -0.309          | -0.298          | 0.000           | 0.6000 |
| 0.7000                   | -0.369          | -0.200          | 0.169           | -0.417          | -0.194          | 0.222           | -0.438          | -0.238          | 0.177           | -0.368          | -0.243          | 0.125           | -0.311          | -0.298          | 0.000           | 0.7000 |
| 0.8000                   | -0.228          | -0.101          | 0.127           | -0.320          | -0.092          | 0.228           | -0.244          | -0.067          | 0.177           | -0.304          | -0.171          | 0.133           | -0.240          | -0.171          | 0.080           | 0.8000 |
| 1.0000                   | 0.309           | 0.404           | 0.095           | 0.008           | 0.428           | 0.419           | 0.210           | 0.793           | 0.583           | 0.007           | 0.024           | 0.017           | -0.080          | -0.047          | 0.033           | 1.0000 |
| M = 1.302      α = 16.12 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.946           | 0.461           | -0.485          | -0.194          | 0.026           | 0.221           | -0.175          | -0.088          | 0.087           | -0.399          | -0.120          | 0.279           | -0.374          | -0.237          | 0.137           | 0.0000 |
| 0.0250                   | -0.065          | 0.338           | 0.402           | -0.313          | 0.001           | 0.314           | -0.284          | -0.097          | 0.187           | -0.416          | -0.135          | 0.281           | -0.428          | -0.265          | 0.163           | 0.0250 |
| 0.0500                   | -0.673          | 0.232           | 0.906           | -0.390          | -0.026          | 0.364           | -0.353          | -0.106          | 0.246           | -0.425          | -0.152          | 0.273           | -0.428          | -0.265          | 0.163           | 0.0500 |
| 0.1000                   | -0.684          | 0.077           | 0.762           | -0.416          | -0.083          | 0.333           | -0.370          | -0.128          | 0.242           | -0.420          | -0.189          | 0.230           | -0.441          | -0.285          | 0.157           | 0.1000 |
| 0.1500                   | -0.689          | 0.012           | 0.701           | -0.452          | -0.117          | 0.335           | -0.389          | -0.153          | 0.235           | -0.414          | -0.194          | 0.219           | -0.413          | -0.295          | 0.118           | 0.1500 |
| 0.2000                   | -0.701          | -0.037          | 0.664           | -0.480          | -0.131          | 0.348           | -0.418          | -0.181          | 0.236           | -0.421          | -0.216          | 0.205           | -0.398          | -0.296          | 0.102           | 0.2000 |
| 0.3000                   | -0.654          | -0.166          | 0.488           | -0.552          | -0.195          | 0.356           | -0.460          | -0.212          | 0.248           | -0.423          | -0.239          | 0.183           | -0.390          | -0.301          | 0.089           | 0.3000 |
| 0.4000                   | -0.631          | -0.216          | 0.416           | -0.538          | -0.223          | 0.315           | -0.434          | -0.219          | 0.215           | -0.397          | -0.266          | 0.131           | -0.330          | -0.296          | 0.034           | 0.4000 |
| 0.5000                   | -0.590          | -0.235          | 0.355           | -0.484          | -0.248          | 0.236           | -0.387          | -0.253          | 0.133           | -0.327          | -0.297          | 0.029           | -0.214          | -0.296          | 0.000           | 0.5000 |
| 0.6000                   | -0.570          | -0.252          | 0.219           | -0.373          | -0.208          | 0.165           | -0.337          | -0.232          | 0.087           | -0.230          | -0.252          | -0.022          | -0.108          | -0.296          | 0.000           | 0.6000 |
| 0.7000                   | -0.470          | -0.252          | 0.219           | -0.373          | -0.208          | 0.165           | -0.337          | -0.232          | 0.087           | -0.230          | -0.252          | -0.022          | -0.108          | -0.296          | 0.000           | 0.7000 |
| 0.8000                   | -0.400          | -0.092          | 0.307           | -0.283          | -0.125          | 0.158           | -0.159          | -0.124          | 0.036           | -0.152          | -0.113          | 0.039           | -0.072          | -0.113          | 0.080           | 0.8000 |
| 1.0000                   | -0.405          | 0.755           | 1.160           | -0.165          | 0.167           | 0.332           | 0.243           | 0.354           | 0.111           | -0.050          | 0.447           | 0.497           | 0.157           | -0.096          | -0.253          | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 5.3° SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$  - Continued

| x/c                       | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                           | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 2.229      α = -03.65 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.597           | 0.313           | -0.283          | 0.097           | 0.287           | 0.190           | 0.122           | 0.381           | 0.259           | 0.059           | 0.330           | 0.271           | 0.146           | 0.194           | 0.048           | 0.0000 |
| 0.0250                    | 0.203           | 0.247           | 0.044           | 0.007           | 0.217           | 0.210           | 0.026           | 0.276           | 0.250           | 0.009           | 0.252           | 0.243           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.039          | 0.196           | 0.235           | -0.049          | 0.169           | 0.218           | -0.034          | 0.203           | 0.237           | -0.025          | 0.199           | 0.224           | 0.007           | 0.186           | 0.179           | 0.0500 |
| 0.1000                    | -0.066          | 0.140           | 0.206           | -0.058          | 0.137           | 0.195           | -0.050          | 0.150           | 0.200           | -0.048          | 0.162           | 0.210           | -0.059          | 0.173           | 0.232           | 0.1000 |
| 0.1500                    | -0.075          | 0.099           | 0.174           | -0.071          | 0.106           | 0.177           | -0.065          | 0.123           | 0.187           | -0.057          | 0.142           | 0.198           | -0.052          | 0.156           | 0.208           | 0.1500 |
| 0.2000                    | -0.072          | 0.080           | 0.152           | -0.082          | 0.092           | 0.174           | -0.080          | 0.103           | 0.184           | -0.069          | 0.125           | 0.193           | -0.057          | 0.133           | 0.190           | 0.2000 |
| 0.3000                    | -0.069          | 0.057           | 0.126           | -0.088          | 0.067           | 0.154           | -0.088          | 0.077           | 0.166           | -0.076          | 0.090           | 0.165           | -0.067          | 0.105           | 0.172           | 0.3000 |
| 0.4000                    | -0.067          | 0.054           | 0.121           | -0.084          | 0.047           | 0.132           | -0.096          | 0.064           | 0.159           | -0.081          | 0.069           | 0.150           | -0.070          | 0.079           | 0.150           | 0.4000 |
| 0.5000                    | -0.068          | 0.038           | 0.107           | -0.083          | 0.038           | 0.121           | -0.099          | 0.043           | 0.142           | -0.090          | 0.052           | 0.142           | -0.077          | 0.072           | 0.150           | 0.5000 |
| 0.6000                    | -0.068          | 0.031           | 0.100           | -0.039          | 0.033           | 0.072           | -0.100          | 0.039           | 0.140           | -0.098          | 0.045           | 0.142           | -0.084          |                 |                 | 0.6000 |
| 0.7000                    | -0.068          | 0.013           | 0.081           | -0.085          | 0.024           | 0.109           |                 | 0.029           |                 | -0.099          | 0.032           | 0.131           | -0.086          |                 |                 | 0.7000 |
| 0.8000                    | -0.064          | 0.007           | 0.071           | -0.079          | 0.011           | 0.090           | -0.091          | 0.009           | 0.101           | -0.099          | 0.014           | 0.113           |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.043          | 0.030           | 0.072           | 0.086           | -0.029          | -0.115          | -0.065          | -0.059          | 0.007           | -0.091          | -0.036          | 0.055           | -0.066          | 0.325           | 0.391           | 1.0000 |
| M = 2.233      α = 00.35  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | -0.133          | 0.173           | 0.306           | 0.083           | 0.104           | 0.020           | 0.084           | -0.462          | -0.546          | 0.056           | 0.206           | 0.150           | -0.013          | 0.110           | 0.123           | 0.0000 |
| 0.0250                    | 0.028           | 0.129           | 0.101           | 0.003           | 0.100           | 0.097           | 0.008           | -0.096          | -0.104          | -0.001          | 0.163           | 0.164           |                 |                 |                 | 0.0250 |
| 0.0500                    | 0.097           | 0.093           | -0.004          | -0.049          | 0.090           | 0.139           | -0.041          | 0.115           | -0.038          | 0.130           | 0.168           | -0.028          | 0.107           | 0.135           | 0.0500          | 0.0500 |
| 0.1000                    | -0.039          | 0.046           | 0.085           | -0.069          | 0.049           | 0.118           | -0.062          | 0.072           | 0.134           | -0.053          | 0.092           | 0.144           | -0.045          | 0.098           | 0.143           | 0.1000 |
| 0.1500                    | -0.082          | 0.010           | 0.092           | -0.079          | 0.031           | 0.110           | -0.077          | 0.054           | 0.131           | -0.069          | 0.096           | 0.145           | -0.063          | 0.083           | 0.145           | 0.1500 |
| 0.2000                    | -0.086          | 0.000           | 0.090           | -0.088          | 0.016           | 0.104           | -0.089          | 0.037           | 0.126           | -0.073          | 0.060           | 0.133           | -0.072          | 0.069           | 0.141           | 0.2000 |
| 0.3000                    | -0.086          | -0.006          | 0.081           | -0.100          | 0.002           | 0.102           | -0.096          | 0.010           | 0.106           | -0.083          | 0.032           | 0.115           | -0.078          | 0.047           | 0.125           | 0.3000 |
| 0.4000                    | -0.084          | -0.014          | 0.070           | -0.099          | -0.016          | 0.083           | -0.104          | -0.005          | 0.099           | -0.089          | 0.012           | 0.102           | -0.082          | 0.028           | 0.111           | 0.4000 |
| 0.5000                    | -0.088          | -0.014          | 0.073           | -0.099          | -0.022          | 0.077           | -0.111          | -0.007          | 0.104           | -0.095          | -0.002          | 0.093           | -0.088          | 0.020           | 0.108           | 0.5000 |
| 0.6000                    | -0.091          | -0.028          | 0.062           | -0.045          | -0.025          | 0.020           | -0.112          | 0.013           | 0.099           | -0.102          | -0.007          | 0.095           | -0.094          |                 |                 | 0.6000 |
| 0.7000                    | -0.092          | -0.038          | 0.054           | -0.102          | -0.035          | 0.067           |                 | -0.024          |                 | -0.106          | -0.021          | 0.084           | -0.097          |                 |                 | 0.7000 |
| 0.8000                    | -0.089          | -0.043          | 0.046           | -0.101          | -0.044          | 0.057           | 0.087           | -0.034          | -0.121          | -0.108          | -0.030          | 0.078           |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.069          | -0.040          | 0.030           | 0.071           | -0.061          | -0.132          | 0.553           | -0.052          | -0.606          | -0.107          | -0.031          | 0.076           | -0.093          | 0.119           | 0.212           | 1.0000 |
| M = 2.232      α = 04.31  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.193           | 0.103           | -0.091          | 0.036           | 0.017           | -0.018          | 0.107           | 0.026           | -0.081          | 0.049           | 0.100           | 0.051           | 0.036           | -0.027          | -0.063          | 0.0000 |
| 0.0250                    | 0.073           | 0.086           | 0.013           | -0.045          | 0.013           | 0.057           | 0.022           | 0.012           | -0.010          | 0.002           | 0.060           | 0.058           |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.018          | 0.070           | 0.088           | -0.094          | 0.006           | 0.100           | -0.034          |                 | 0.034           | -0.030          | 0.032           | 0.062           | -0.023          | 0.011           | 0.034           | 0.0500 |
| 0.1000                    | -0.111          | 0.037           | 0.148           | -0.100          | -0.015          | 0.085           | -0.060          | -0.014          | 0.045           | -0.047          | 0.011           | 0.059           | -0.055          | 0.024           | 0.079           | 0.1000 |
| 0.1500                    | -0.129          | 0.010           | 0.139           | -0.106          | -0.020          | 0.086           | -0.076          | -0.018          | 0.058           | -0.063          | -0.006          | 0.058           | -0.060          | 0.011           | 0.071           | 0.1500 |
| 0.2000                    | -0.129          | -0.002          | 0.128           | -0.111          | -0.030          | 0.081           | -0.089          | -0.030          | 0.060           | -0.073          | -0.020          | 0.052           | -0.068          | -0.002          | 0.066           | 0.2000 |
| 0.3000                    | -0.128          | -0.014          | 0.114           | -0.119          | -0.046          | 0.073           | -0.103          | -0.041          | 0.062           | -0.082          | -0.036          | 0.046           | -0.077          | -0.016          | 0.060           | 0.3000 |
| 0.4000                    | -0.126          | -0.028          | 0.098           | -0.116          | -0.054          | 0.062           | -0.110          | -0.046          | 0.065           | -0.094          | -0.050          | 0.044           | -0.083          | -0.034          | 0.049           | 0.4000 |
| 0.5000                    | -0.126          | -0.035          | 0.092           | -0.118          | -0.064          | 0.054           | -0.121          | -0.056          | 0.064           | -0.102          | -0.054          | 0.047           | -0.090          | -0.025          | 0.066           | 0.5000 |
| 0.6000                    | -0.125          | -0.047          | 0.078           | -0.059          | -0.067          | -0.008          | -0.124          | -0.056          | 0.067           | -0.108          | -0.054          | 0.054           | -0.094          |                 |                 | 0.6000 |
| 0.7000                    | -0.122          | -0.054          | 0.062           | -0.119          | -0.069          | 0.050           |                 | -0.058          |                 | -0.112          | -0.060          | 0.052           | -0.101          |                 |                 | 0.7000 |
| 0.8000                    | -0.119          | -0.061          | 0.058           | -0.119          | -0.077          | 0.041           | -0.069          | -0.073          | -0.004          | -0.116          | -0.067          | 0.049           |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.118          | -0.033          | 0.085           | 0.063           | -0.108          | -0.171          | 0.067           | -0.141          | -0.208          | -0.122          | -0.087          | 0.035           | -0.139          | 0.423           | 0.562           | 1.0000 |
| M = 2.236      α = 08.36  |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                    | 0.405           | 0.087           | -0.318          | 0.008           | 0.063           | 0.055           | 0.008           | -0.064          | -0.073          | -0.002          | -0.126          | -0.124          | 0.011           | -0.099          | -0.110          | 0.0000 |
| 0.0250                    | 0.049           | 0.078           | 0.049           | -0.069          | 0.030           | 0.098           | -0.065          | -0.032          | 0.033           | -0.041          | -0.086          | -0.046          |                 |                 |                 | 0.0250 |
| 0.0500                    | -0.160          | 0.062           | 0.222           | -0.117          | 0.005           | 0.122           | -0.111          | -0.017          | 0.094           | -0.067          | -0.064          | 0.003           | -0.033          | -0.089          | -0.056          | 0.0500 |
| 0.1000                    | -0.138          | 0.010           | 0.148           | -0.128          | -0.020          | 0.108           | -0.121          | -0.037          | 0.085           | -0.084          | -0.072          | 0.012           | -0.060          | -0.084          | -0.024          | 0.1000 |
| 0.1500                    | -0.150          | -0.026          | 0.124           | -0.133          | -0.033          | 0.100           | -0.124          | -0.046          | 0.078           | -0.094          | -0.078          | 0.016           | -0.069          | -0.083          | -0.019          | 0.1500 |
| 0.2000                    | -0.156          | -0.035          | 0.121           | -0.140          | -0.044          | 0.096           | -0.133          | -0.059          | 0.074           | -0.106          | -0.081          | 0.025           | -0.074          | -0.084          | -0.010          | 0.2000 |
| 0.3000                    | -0.159          | -0.055          | 0.104           | -0.150          | -0.055          | 0.095           | -0.138          | -0.068          | 0.070           | -0.109          | -0.089          | 0.020           | -0.088          | -0.087          | 0.000           | 0.3000 |
| 0.4000                    | -0.161          | -0.063          | 0.099           | -0.150          | -0.064          | 0.086           | -0.142          | -0.080          | 0.062           | -0.117          | -0.096          | 0.022           | -0.096          | -0.090          | 0.006           | 0.4000 |
| 0.5000                    | -0.162          | -0.070          | 0.092           | -0.156          | -0.072          | 0.085           | -0.144          | -0.090          | 0.055           | -0.124          | -0.100          | 0.024           | -0.105          | -0.029          | 0.076           | 0.5000 |
| 0.6000                    | -0.158          | -0.077          | 0.082           | -0.093          | -0.081          | 0.012           | -0.148          | -0.092          | 0.056           | -0.129          | -0.099          | 0.030           | -0.112          |                 |                 | 0.6000 |
| 0.7000                    | -0.158          | -0.086          | 0.072           | -0.166          | -0.083          | 0.083           |                 | -0.097          |                 | -0.133          | -0.098          | 0.035           | -0.116          |                 |                 | 0.7000 |
| 0.8000                    | -0.149          | -0.090          | 0.059           | -0.159          | -0.095          | 0.063           | -0.107          | -0.110          | -0.003          | -0.133          | -0.103          | 0.030           |                 |                 |                 | 0.8000 |
| 1.0000                    | -0.106          | -0.077          | 0.029           | -0.158          | -0.104          | 0.054           | -0.078          | -0.159          | -0.081          | -0.127          | -0.136          | -0.009          | -0.122          | 0.350           | 0.472           | 1.0000 |



(b) BVWC;  $\delta = 0.5^\circ$  - Concluded

| x/c                      | y/b=0.150                |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub>          | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
|                          | M = 2.228      α = 12.41 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.350                    | -0.066          | -0.416          | -0.018          | -0.092          | -0.074          | 0.015           | -0.090          | -0.105          | -0.086          | -0.074          | 0.012           | -0.110          | -0.147          | -0.037          | 0.0000 |
| 0.0250                   | 0.038                    | -0.071          | -0.109          | -0.070          | -0.080          | -0.010          | -0.049          | -0.067          | -0.018          | -0.097          | -0.066          | 0.031           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.156                   | -0.079          | 0.077           | -0.104          | -0.073          | 0.031           | -0.090          | -0.055          | 0.035           | -0.106          | -0.064          | 0.042           | -0.111          | -0.118          | -0.007          | 0.0500 |
| 0.1000                   | -0.192                   | -0.107          | 0.085           | -0.117          | -0.069          | 0.047           | -0.107          | -0.069          | 0.038           | -0.115          | -0.079          | 0.035           | -0.115          | -0.105          | 0.010           | 0.1000 |
| 0.1500                   | -0.196                   | -0.117          | 0.079           | -0.135          | -0.067          | 0.069           | -0.119          | -0.084          | 0.035           | -0.124          | -0.085          | 0.040           | -0.122          | -0.108          | 0.014           | 0.1500 |
| 0.2000                   | -0.197                   | -0.125          | 0.073           | -0.155          | -0.076          | 0.080           | -0.128          | -0.085          | 0.043           | -0.129          | -0.090          | 0.039           | -0.125          | -0.111          | 0.014           | 0.2000 |
| 0.3000                   | -0.196                   | -0.126          | 0.070           | -0.159          | -0.088          | 0.071           | -0.139          | -0.089          | 0.050           | -0.135          | -0.097          | 0.038           | -0.128          | -0.116          | 0.012           | 0.3000 |
| 0.4000                   | -0.196                   | -0.128          | 0.068           | -0.170          | -0.104          | 0.066           | -0.149          | -0.100          | 0.049           | -0.140          | -0.103          | 0.036           | -0.131          | -0.123          | 0.008           | 0.4000 |
| 0.5000                   | -0.196                   | -0.121          | 0.075           | -0.169          | -0.109          | 0.060           | -0.159          | -0.103          | 0.056           | -0.149          | -0.108          | 0.041           | -0.133          | -0.098          | 0.035           | 0.5000 |
| 0.6000                   | -0.191                   | -0.108          | 0.083           | -0.117          | -0.112          | 0.005           | -0.163          | -0.105          | 0.058           | -0.153          | -0.110          | 0.043           | -0.136          |                 |                 | 0.6000 |
| 0.7000                   | -0.181                   | -0.103          | 0.078           | -0.164          | -0.124          | 0.040           |                 | -0.111          |                 | -0.157          | -0.113          | 0.044           | -0.138          |                 |                 | 0.7000 |
| 0.8000                   | -0.154                   | -0.051          | 0.103           | -0.184          | -0.125          | 0.059           | -0.128          | -0.117          | 0.011           | -0.158          | -0.119          | 0.038           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.052                   | 0.194           | 0.245           | -0.139          | -0.092          | 0.047           | -0.036          | -0.131          | -0.095          | -0.147          | -0.143          | 0.004           | -0.146          | 0.497           | 0.643           | 1.0000 |
| M = 2.232      α = 16.42 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.310                    | -0.158          | -0.468          | -0.059          | -0.210          | -0.151          | 0.004           | -0.192          | -0.196          | -0.087          | -0.139          | -0.051          | -0.059          | -0.153          | -0.095          | 0.0000 |
| 0.0250                   | 0.022                    | -0.156          | -0.178          | -0.112          | -0.189          | -0.077          | -0.046          | -0.156          | -0.109          | -0.072          | -0.134          | -0.062          |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.158                   | -0.157          | 0.001           | -0.149          | -0.175          | -0.026          | -0.080          | -0.135          | -0.055          | -0.068          | -0.132          | -0.064          | -0.089          | -0.134          | -0.045          | 0.0500 |
| 0.1000                   | -0.194                   | -0.168          | 0.027           | -0.174          | -0.167          | 0.006           | -0.095          | -0.137          | -0.042          | -0.090          | -0.134          | -0.044          | -0.108          | -0.126          | -0.017          | 0.1000 |
| 0.1500                   | -0.199                   | -0.170          | 0.028           | -0.177          | -0.160          | 0.017           | -0.118          | -0.133          | -0.015          | -0.099          | -0.138          | -0.040          | -0.117          | -0.128          | -0.012          | 0.1500 |
| 0.2000                   | -0.209                   | -0.170          | 0.039           | -0.183          | -0.169          | 0.014           | -0.140          | -0.133          | 0.007           | -0.118          | -0.139          | -0.021          | -0.123          | -0.132          | -0.009          | 0.2000 |
| 0.3000                   | -0.210                   | -0.170          | 0.040           | -0.189          | -0.177          | 0.013           | -0.154          | -0.134          | 0.020           | -0.130          | -0.143          | -0.013          | -0.128          | -0.136          | -0.008          | 0.3000 |
| 0.4000                   | -0.210                   | -0.158          | 0.052           | -0.186          | -0.185          | 0.001           | -0.157          | -0.136          | 0.021           | -0.141          | -0.143          | -0.002          | -0.134          | -0.140          | -0.006          | 0.4000 |
| 0.5000                   | -0.208                   | -0.146          | 0.062           | -0.190          | -0.181          | 0.009           | -0.167          | -0.142          | 0.026           | -0.151          | -0.142          | 0.009           | -0.141          | -0.086          | 0.056           | 0.5000 |
| 0.6000                   | -0.201                   | -0.140          | 0.061           | -0.102          | -0.175          | -0.073          | -0.177          | -0.143          | 0.034           | -0.157          | -0.143          | 0.014           | -0.146          |                 |                 | 0.6000 |
| 0.7000                   | -0.203                   | -0.138          | 0.065           | -0.195          | -0.171          | 0.025           |                 | -0.142          |                 | -0.163          | -0.137          | 0.027           | -0.151          |                 |                 | 0.7000 |
| 0.8000                   | -0.185                   | -0.131          | 0.053           | -0.195          | -0.152          | 0.042           | -0.103          | -0.123          | -0.020          | -0.164          | -0.137          | 0.027           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.088                   | -0.106          | -0.018          | 0.088           | -0.076          | -0.164          | 0.094           | -0.031          | -0.126          | -0.147          | -0.160          | -0.013          | -0.164          | 1.061           | 1.225           | 1.0000 |
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TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.7^\circ$

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| x/c                      | y/b=0.150                 |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pL</sub>           | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> |        |
|                          | M = 0.700      α = -04.00 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.784                     | 0.256           | -0.527          | -0.965          | 0.082           | 1.047           | -0.839          | 0.424           | 1.263           | -0.683          | 0.366           | 1.049           | -0.598          | 0.205           | 0.803           | 0.0000 |
| 0.0250                   | 0.095                     | 0.241           | -0.147          | -0.908          | 0.148           | 1.055           | -0.860          | 0.304           | 1.164           | -0.695          | 0.275           | 0.971           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.336                    | 0.211           | 0.548           | -0.810          | 0.175           | 0.985           | -0.850          | 0.215           | 1.065           | -0.698          | 0.210           | 0.908           | -0.565          | 0.178           | 0.744           | 0.0500 |
| 0.1000                   | -0.422                    | 0.108           | 0.530           | -0.496          | 0.114           | 0.610           | -0.737          | 0.130           | 0.867           | -0.674          | 0.153           | 0.826           | -0.541          | 0.142           | 0.683           | 0.1000 |
| 0.1500                   | -0.326                    | 0.088           | 0.414           | -0.351          | 0.094           | 0.445           | -0.549          | 0.095           | 0.646           | -0.644          | 0.106           | 0.749           | -0.525          | 0.096           | 0.621           | 0.1500 |
| 0.2000                   | -0.301                    | 0.056           | 0.357           | -0.305          | 0.061           | 0.365           | -0.338          | 0.071           | 0.408           | -0.594          | 0.074           | 0.668           | -0.506          | 0.066           | 0.573           | 0.2000 |
| 0.3000                   | -0.267                    | 0.018           | 0.284           | -0.240          | 0.035           | 0.275           | -0.206          | 0.049           | 0.255           | -0.424          | 0.039           | 0.463           | -0.469          | 0.041           | 0.510           | 0.3000 |
| 0.4000                   | -0.219                    | 0.004           | 0.223           | -0.190          | 0.015           | 0.205           | -0.152          | 0.026           | 0.178           | -0.249          | 0.023           | 0.272           | -0.408          | 0.023           | 0.432           | 0.4000 |
| 0.5000                   | -0.169                    | -0.001          | 0.168           | -0.145          | 0.014           | 0.158           | -0.124          | 0.021           | 0.145           | -0.113          | 0.008           | 0.120           | -0.304          | 0.014           | 0.318           | 0.5000 |
| 0.6000                   | -0.110                    | 0.004           | 0.114           | -0.103          | 0.012           | 0.115           | -0.091          | 0.014           | 0.105           | -0.085          | -0.004          | 0.081           | -0.211          |                 | 0.6000          | 0.6000 |
| 0.7000                   | -0.063                    | 0.012           | 0.075           | -0.070          | 0.007           | 0.077           | -0.008          |                 | -0.008          | -0.056          | -0.011          | 0.045           | -0.135          |                 | 0.7000          | 0.7000 |
| 0.8000                   | -0.028                    | 0.013           | 0.041           | -0.041          |                 | 0.041           | -0.031          | 0.017           | 0.017           | -0.034          | -0.009          | 0.024           |                 |                 | 0.8000          | 0.8000 |
| 1.0000                   | 0.004                     | -0.003          | -0.007          | 0.007           | -0.017          | -0.024          | 0.020           | 0.015           | -0.004          | -0.007          | 0.022           | 0.029           | -0.007          | 0.101           | 0.108           | 1.0000 |
| M = 0.698      α = 00.00 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.322                     | -0.195          | -5.518          | -0.616          | -0.057          | 4.440           | -1.213          | 0.373           | 3.515           | -1.341          | 0.338           | 3.421           | -0.919          | 0.073           | 4.008           | 0.0000 |
| 0.0250                   | 0.050                     | -0.018          | -4.968          | -0.559          | 0.013           | 4.428           | -0.750          | 0.162           | 4.088           | -0.836          | 0.200           | 4.064           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.150                    | 0.074           | 4.776           | -0.497          | 0.045           | 4.458           | -0.450          | 0.038           | 4.312           | -0.502          | 0.109           | 4.389           | -0.668          | 0.081           | 4.252           | 0.0500 |
| 0.1000                   | -0.332                    | 0.005           | 4.663           | -0.363          | -0.003          | 4.641           | -0.333          | 0.052           | 4.615           | -0.346          | 0.074           | 4.580           | -0.460          | 0.070           | 4.469           | 0.1000 |
| 0.1500                   | -0.289                    | -0.048          | 4.759           | -0.295          | -0.022          | 4.728           | -0.277          | 0.019           | 4.704           | -0.292          | 0.030           | 4.678           | -0.298          | 0.041           | 4.661           | 0.1500 |
| 0.2000                   | -0.270                    | -0.057          | 4.787           | -0.273          | -0.038          | 4.765           | -0.244          | 0.001           | 4.756           | -0.255          | 0.019           | 4.726           | -0.263          | 0.020           | 4.717           | 0.2000 |
| 0.3000                   | -0.256                    | -0.065          | 4.809           | -0.252          | -0.049          | 4.797           | -0.199          | -0.013          | 4.815           | -0.196          | -0.003          | 4.807           | -0.209          | 0.001           | 4.790           | 0.3000 |
| 0.4000                   | -0.232                    | -0.079          | 4.847           | -0.208          | -0.046          | 4.838           | -0.169          | -0.022          | 4.853           | -0.165          | -0.016          | 4.850           | -0.180          | -0.008          | 4.828           | 0.4000 |
| 0.5000                   | -0.181                    | -0.062          | 4.881           | -0.164          | -0.035          | 4.871           | -0.141          | -0.021          | 4.880           | -0.132          | -0.022          | 4.890           | -0.133          | -0.009          | 4.876           | 0.5000 |
| 0.6000                   | -0.130                    | -0.051          | 4.821           | -0.121          | -0.021          | 4.801           | -0.107          | -0.024          | 4.817           | -0.104          | -0.026          | 4.823           | -0.112          |                 | 0.6000          | 0.6000 |
| 0.7000                   | -0.076                    | -0.019          | 4.842           | -0.086          | -0.028          | 4.842           | -0.030          | -0.030          | 4.817           | -0.077          | -0.034          | 4.857           | -0.097          |                 | 0.7000          | 0.7000 |
| 0.8000                   | -0.040                    | -0.011          | 4.871           | -0.057          | -0.032          | 4.875           | -0.036          | -0.036          | 4.600           | -0.058          | -0.029          | 4.871           |                 |                 | 0.8000          | 0.8000 |
| 1.0000                   | -0.018                    | -0.070          | -4.952          | -0.015          | -0.034          | -4.919          | 0.039           | -0.045          | -4.984          | -0.041          | 0.017           | 4.842           | -0.078          | 0.115           | 4.807           | 1.0000 |
| M = 0.697      α = 03.91 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.871                     | 0.039           | -0.832          | -0.363          | -0.063          | 0.299           | -0.502          | 0.013           | 0.515           | -0.369          | 0.133           | 0.502           | -0.511          | -0.138          | 0.373           | 0.0000 |
| 0.0250                   | 0.121                     | -0.025          | -0.147          | -0.370          | -0.088          | 0.282           | -0.420          | -0.016          | 0.403           | -0.381          | 0.053           | 0.433           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.329                    | -0.074          | 0.255           | -0.362          | -0.107          | 0.256           | -0.357          | -0.039          | 0.317           | -0.370          | -0.001          | 0.369           | -0.370          | -0.046          | 0.325           | 0.0500 |
| 0.1000                   | -0.334                    | -0.126          | 0.208           | -0.304          | -0.126          | 0.177           | -0.287          | -0.065          | 0.223           | -0.278          | -0.028          | 0.251           | -0.273          | -0.010          | 0.263           | 0.1000 |
| 0.1500                   | -0.322                    | -0.132          | 0.190           | -0.281          | -0.124          | 0.157           | -0.250          | -0.075          | 0.175           | -0.247          | -0.044          | 0.202           | -0.220          | -0.031          | 0.189           | 0.1500 |
| 0.2000                   | -0.298                    | -0.135          | 0.164           | -0.267          | -0.123          | 0.144           | -0.225          | -0.079          | 0.146           | -0.213          | -0.054          | 0.159           | -0.190          | -0.045          | 0.145           | 0.2000 |
| 0.3000                   | -0.264                    | -0.143          | 0.121           | -0.221          | -0.113          | 0.107           | -0.177          | -0.081          | 0.107           | -0.175          | -0.063          | 0.112           | -0.169          | -0.050          | 0.119           | 0.3000 |
| 0.4000                   | -0.215                    | -0.142          | 0.073           | -0.182          | -0.096          | 0.086           | -0.155          | -0.077          | 0.078           | -0.153          | -0.064          | 0.089           | -0.154          | -0.053          | 0.102           | 0.4000 |
| 0.5000                   | -0.162                    | -0.108          | 0.054           | -0.143          | -0.077          | 0.067           | -0.134          | -0.064          | 0.070           | -0.128          | -0.063          | 0.065           | -0.122          | -0.051          | 0.071           | 0.5000 |
| 0.6000                   | -0.114                    | -0.097          | 0.016           | -0.107          | -0.065          | 0.052           | -0.104          | -0.059          | 0.046           | -0.103          | -0.062          | 0.041           | -0.105          |                 | 0.6000          | 0.6000 |
| 0.7000                   | -0.079                    | -0.060          | 0.019           | -0.082          | -0.060          | 0.023           | -0.065          | -0.065          | -0.080          | -0.063          | 0.017           | -0.097          |                 |                 | 0.7000          | 0.7000 |
| 0.8000                   | -0.056                    | -0.045          | 0.012           | -0.057          | -0.054          | 0.002           | -0.060          | -0.063          | -0.003          | -0.062          | -0.054          | 0.009           |                 |                 | 0.8000          | 0.8000 |
| 1.0000                   | -0.047                    | -0.079          | -0.032          | -0.001          | -0.014          | -0.013          | -0.037          | -0.034          | 0.003           | -0.041          | -0.003          | 0.038           | -0.126          | 0.025           | 0.151           | 1.0000 |
| M = 0.699      α = 07.96 |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 2.295                     | 0.362           | -1.933          | -0.750          | -0.199          | 0.551           | -0.568          | -0.261          | 0.307           | -0.167          | -0.154          | 0.013           | -0.195          | -0.198          | -0.003          | 0.0000 |
| 0.0250                   | 0.138                     | 0.401           | 0.263           | -0.755          | -0.087          | 0.668           | -0.566          | -0.155          | 0.411           | -0.211          | -0.148          | 0.064           |                 |                 |                 | 0.0250 |
| 0.0500                   | -1.145                    | 0.406           | 1.551           | -0.752          | -0.016          | 0.735           | -0.548          | -0.099          | 0.449           | -0.235          | -0.143          | 0.092           | -0.183          | -0.159          | 0.024           | 0.0500 |
| 0.1000                   | -1.089                    | 0.316           | 1.404           | -0.719          | 0.002           | 0.721           | -0.464          | -0.135          | 0.329           | -0.221          | -0.141          | 0.081           | -0.171          | -0.133          | 0.038           | 0.1000 |
| 0.1500                   | -0.988                    | 0.226           | 1.214           | -0.662          | 0.010           | 0.672           | -0.396          | -0.135          | 0.261           | -0.215          | -0.136          | 0.079           | -0.160          | -0.122          | 0.038           | 0.1500 |
| 0.2000                   | -0.894                    | 0.169           | 1.062           | -0.609          | 0.006           | 0.615           | -0.340          | -0.137          | 0.203           | -0.196          | -0.131          | 0.065           | -0.149          | -0.122          | 0.028           | 0.2000 |
| 0.3000                   | -0.741                    | 0.040           | 0.781           | -0.505          | -0.038          | 0.467           | -0.275          | -0.132          | 0.143           | -0.166          | -0.132          | 0.034           | -0.145          | -0.116          | 0.029           | 0.3000 |
| 0.4000                   | -0.551                    | -0.006          | 0.545           | -0.417          | -0.065          | 0.352           | -0.217          | -0.129          | 0.088           | -0.148          | -0.125          | 0.023           | -0.129          | -0.107          | 0.022           | 0.4000 |
| 0.5000                   | -0.412                    | -0.035          | 0.377           | -0.312          | -0.070          | 0.242           | -0.190          | -0.122          | 0.067           | -0.129          | -0.121          | 0.008           | -0.122          | -0.089          | 0.033           | 0.5000 |
| 0.6000                   | -0.316                    | -0.037          | 0.279           | -0.240          | -0.064          | 0.176           | -0.144          | -0.115          | 0.029           | -0.099          | -0.122          | -0.023          | -0.105          |                 | 0.6000          | 0.6000 |
| 0.7000                   | -0.233                    | -0.038          | 0.195           | -0.162          | -0.073          | 0.089           | -0.108          | -0.108          | -0.086          | -0.096          | -0.103          | -0.017          | -0.091          |                 | 0.7000          | 0.7000 |
| 0.8000                   | -0.156                    | -0.046          | 0.110           | -0.123          | -0.076          | 0.047           | -0.070          | -0.104          | -0.034          | -0.073          | -0.092          | -0.019          |                 |                 | 0.8000          | 0.8000 |
| 1.0000                   | -0.019                    | -0.085          | -0.066          | -0.161          | -0.061          | 0.099           | -0.020          | -0.103          | -0.084          | -0.049          | -0.096          | -0.047          | -0.064          | 0.141           | 0.205           | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.7^\circ$  - Continued

| x/c                      | y/b=0.150       |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> | C <sub>PL</sub> | C <sub>PR</sub> | ΔC <sub>p</sub> |        |
| M = 0.699      α = 11.96 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 3.536           | 0.302           | -3.233          | -1.071          | 0.140           | 1.210           | -0.730          | -0.271          | 0.459           | -0.485          | -0.423          | 0.063           | -0.379          | -0.248          | 0.131           | 0.0000 |
| 0.0250                   | 0.110           | 0.301           | 0.191           | -1.084          | 0.209           | 1.293           | -0.725          | -0.092          | 0.633           | -0.521          | -0.321          | 0.200           |                 |                 |                 | 0.0250 |
| 0.0500                   | -1.944          | 0.290           | 2.233           | -1.084          | 0.241           | 1.325           | -0.719          | 0.019           | 0.738           | -0.542          | -0.258          | 0.284           | -0.348          | -0.218          | 0.130           | 0.0500 |
| 0.1000                   | -1.936          | 0.236           | 2.172           | -1.042          | 0.197           | 1.239           | -0.705          | 0.036           | 0.741           | -0.535          | -0.248          | 0.287           | -0.317          | -0.205          | 0.112           | 0.1000 |
| 0.1500                   | -1.810          | 0.188           | 2.001           | -0.986          | 0.169           | 1.155           | -0.669          | 0.035           | 0.704           | -0.482          | -0.233          | 0.249           | -0.286          | -0.209          | 0.078           | 0.1500 |
| 0.2000                   | -1.577          | 0.150           | 1.727           | -0.945          | 0.138           | 1.084           | -0.628          | 0.019           | 0.647           | -0.448          | -0.223          | 0.225           | -0.265          | -0.209          | 0.056           | 0.2000 |
| 0.3000                   | -1.060          | 0.083           | 1.143           | -0.843          | 0.079           | 0.922           | -0.563          | -0.007          | 0.556           | -0.391          | -0.212          | 0.179           | -0.228          | -0.209          | 0.019           | 0.3000 |
| 0.4000                   | -0.702          | 0.046           | 0.749           | -0.689          | 0.028           | 0.717           | -0.464          | -0.034          | 0.429           | -0.342          | -0.206          | 0.136           | -0.215          | -0.214          | 0.001           | 0.4000 |
| 0.5000                   | -0.500          | 0.023           | 0.523           | -0.590          | 0.007           | 0.597           | -0.397          | -0.043          | 0.354           | -0.292          | -0.199          | 0.093           | -0.191          | -0.210          | -0.019          | 0.5000 |
| 0.6000                   | -0.392          | 0.018           | 0.410           | -0.461          | -0.008          | 0.454           | -0.342          | -0.060          | 0.282           | -0.250          | -0.211          | 0.038           | -0.169          |                 |                 | 0.6000 |
| 0.7000                   | -0.303          | -0.003          | 0.300           | -0.379          | -0.032          | 0.348           |                 | -0.084          |                 | -0.210          | -0.186          | 0.024           | -0.153          |                 |                 | 0.7000 |
| 0.8000                   | -0.241          | -0.020          | 0.221           | -0.302          | -0.062          | 0.240           | -0.205          | -0.104          | 0.101           | -0.181          | -0.177          | 0.004           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.197          | -0.048          | 0.150           | -0.163          | -0.142          | 0.021           | -0.034          | -0.132          | -0.098          | -0.153          | -0.206          | -0.053          | -0.148          | -0.047          | 0.101           | 1.0000 |
| M = 0.698      α = 16.02 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 3.378           | 0.401           | -2.976          | -1.193          | 0.266           | 1.459           | -0.836          | -0.300          | 0.536           | -0.631          | -0.097          | 0.534           | -0.434          | -0.260          | 0.173           | 0.0000 |
| 0.0250                   | 0.098           | 0.365           | 0.267           | -1.200          | 0.260           | 1.460           | -0.829          | 0.020           | 0.849           | -0.627          | 0.006           | 0.633           |                 |                 |                 | 0.0250 |
| 0.0500                   | -1.848          | 0.318           | 2.166           | -1.192          | 0.245           | 1.437           | -0.823          | 0.208           | 1.031           | -0.624          | 0.066           | 0.690           | -0.467          | -0.233          | 0.234           | 0.0500 |
| 0.1000                   | -1.738          | 0.194           | 1.932           | -1.127          | 0.186           | 1.313           | -0.816          | 0.189           | 1.005           | -0.619          | 0.059           | 0.678           | -0.476          | -0.213          | 0.263           | 0.1000 |
| 0.1500                   | -1.638          | 0.161           | 1.799           | -1.080          | 0.144           | 1.224           | -0.788          | 0.133           | 0.921           | -0.608          | 0.040           | 0.648           | -0.462          | -0.202          | 0.260           | 0.1500 |
| 0.2000                   | -1.529          | 0.121           | 1.650           | -1.015          | 0.109           | 1.124           | -0.768          | 0.097           | 0.866           | -0.602          | 0.024           | 0.626           | -0.446          | -0.210          | 0.236           | 0.2000 |
| 0.3000                   | -1.279          | 0.042           | 1.321           | -0.888          | 0.073           | 0.960           | -0.708          | 0.062           | 0.770           | -0.586          | -0.015          | 0.571           | -0.411          | -0.206          | 0.205           | 0.3000 |
| 0.4000                   | -1.063          | 0.013           | 1.076           | -0.775          | 0.024           | 0.799           | -0.645          | 0.012           | 0.657           | -0.537          | -0.048          | 0.489           | -0.375          | -0.207          | 0.168           | 0.4000 |
| 0.5000                   | -0.841          | 0.001           | 0.842           | -0.659          | 0.006           | 0.665           | -0.559          | -0.011          | 0.548           | -0.485          | -0.078          | 0.407           | -0.346          | -0.206          | 0.139           | 0.5000 |
| 0.6000                   | -0.695          | -0.008          | 0.688           | -0.566          | -0.023          | 0.542           | -0.496          | -0.053          | 0.444           | -0.402          | -0.106          | 0.296           | -0.318          |                 |                 | 0.6000 |
| 0.7000                   | -0.570          | -0.022          | 0.549           | -0.462          | -0.059          | 0.403           |                 | -0.109          |                 | -0.353          | -0.117          | 0.237           | -0.283          |                 |                 | 0.7000 |
| 0.8000                   | -0.457          | -0.059          | 0.398           | -0.387          | -0.101          | 0.286           | -0.258          | -0.137          | 0.121           | -0.304          | -0.137          | 0.167           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.263          | -0.201          | 0.061           | -0.324          | -0.207          | 0.117           | -0.129          | -0.108          | -0.237          | -0.201          | -0.204          | -0.003          | -0.135          | -0.172          | -0.037          | 1.0000 |
| M = 1.300      α =-03.81 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.040           | 0.376           | 0.336           | -0.389          | 0.276           | 0.665           | -0.497          | 0.418           | 0.915           | -0.478          | 0.370           | 0.848           | -0.407          | 0.143           | 0.550           | 0.0000 |
| 0.0250                   | -0.092          | 0.283           | 0.375           | -0.360          | 0.238           | 0.598           | -0.477          | 0.293           | 0.770           | -0.470          | 0.268           | 0.738           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.179          | 0.212           | 0.390           | -0.343          | 0.204           | 0.547           | -0.455          | 0.212           | 0.667           | -0.454          | 0.202           | 0.656           | -0.434          | 0.118           | 0.551           | 0.0500 |
| 0.1000                   | -0.218          | 0.135           | 0.354           | -0.345          | 0.151           | 0.496           | -0.405          | 0.180           | 0.586           | -0.397          | 0.181           | 0.578           | -0.432          | 0.090           | 0.522           | 0.1000 |
| 0.1500                   | -0.156          | 0.130           | 0.285           | -0.272          | 0.125           | 0.398           | -0.387          | 0.129           | 0.516           | -0.388          | 0.127           | 0.516           | -0.403          | 0.059           | 0.462           | 0.1500 |
| 0.2000                   | -0.133          | 0.128           | 0.261           | -0.163          | 0.111           | 0.274           | -0.381          | 0.096           | 0.477           | -0.393          | 0.066           | 0.458           | -0.385          | 0.027           | 0.412           | 0.2000 |
| 0.3000                   | -0.123          | 0.081           | 0.204           | -0.152          | 0.063           | 0.215           | -0.123          | 0.060           | 0.182           | -0.378          | 0.019           | 0.397           | -0.373          | -0.004          | 0.369           | 0.3000 |
| 0.4000                   | -0.138          | 0.060           | 0.198           | -0.157          | 0.031           | 0.189           | -0.174          | 0.004           | 0.179           | -0.244          | 0.003           | 0.246           | -0.368          | 0.002           | 0.369           | 0.4000 |
| 0.5000                   | -0.138          | 0.022           | 0.160           | -0.151          | 0.019           | 0.170           | -0.174          | 0.003           | 0.176           | -0.200          | -0.007          | 0.193           | -0.339          | -0.011          | 0.328           | 0.5000 |
| 0.6000                   | -0.125          | 0.009           | 0.134           | -0.134          | -0.002          | 0.131           | -0.166          | -0.001          | 0.165           | -0.177          | -0.014          | 0.163           | -0.244          |                 |                 | 0.6000 |
| 0.7000                   | -0.110          | 0.014           | 0.123           | -0.141          | -0.010          | 0.131           |                 | -0.015          | -0.158          | -0.036          | 0.122           | -0.167          |                 |                 |                 | 0.7000 |
| 0.8000                   | -0.091          | -0.024          | 0.068           | -0.104          | -0.044          | 0.060           | -0.112          | -0.070          | 0.042           | -0.124          | -0.083          | 0.041           |                 |                 |                 | 0.8000 |
| 1.0000                   | -0.045          | -0.223          | -0.178          | 0.098           | -0.194          | -0.292          | -0.007          | -0.307          | -0.300          | -0.009          | -0.253          | -0.244          | -0.051          | -0.342          | -0.291          | 1.0000 |
| M = 1.302      α = 00.10 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.073          | 0.121           | 0.193           | -0.258          | 0.127           | 0.385           | -0.382          | 0.210           | 0.592           | -0.291          | 0.189           | 0.480           | -0.378          | 0.014           | 0.392           | 0.0000 |
| 0.0250                   | -0.135          | 0.094           | 0.229           | -0.282          | 0.078           | 0.360           | -0.381          | 0.122           | 0.503           | -0.355          | -0.115          | 0.470           |                 |                 |                 | 0.0250 |
| 0.0500                   | -0.171          | 0.067           | 0.237           | -0.293          | 0.044           | 0.337           | -0.369          | 0.063           | 0.432           | -0.385          | 0.062           | 0.447           | -0.379          | 0.020           | 0.398           | 0.0500 |
| 0.1000                   | -0.166          | 0.009           | 0.175           | -0.278          | 0.021           | 0.299           | -0.313          | 0.031           | 0.344           | -0.344          | 0.019           | 0.362           | -0.371          | 0.010           | 0.381           | 0.1000 |
| 0.1500                   | -0.170          | -0.003          | 0.167           | -0.236          |                 | 0.235           | -0.286          | 0.010           | 0.296           | -0.321          | -0.010          | 0.311           | -0.355          | -0.014          | 0.340           | 0.1500 |
| 0.2000                   | -0.153          | -0.005          | 0.148           | -0.211          | -0.017          | 0.194           | -0.255          | -0.020          | 0.235           | -0.309          | -0.041          | 0.268           | -0.339          | -0.051          | 0.288           | 0.2000 |
| 0.3000                   | -0.154          | -0.020          | 0.134           | -0.187          | -0.036          | 0.152           | -0.216          | -0.048          | 0.167           | -0.279          | -0.052          | 0.227           | -0.328          | -0.094          | 0.234           | 0.3000 |
| 0.4000                   | -0.170          | -0.061          | 0.109           | -0.175          | -0.069          | 0.106           | -0.195          | -0.076          | 0.118           | -0.225          | -0.101          | 0.124           | -0.299          | -0.109          | 0.190           | 0.4000 |
| 0.5000                   | -0.171          | 0.059           | 0.112           | -0.177          | -0.094          | 0.079           | -0.204          | -0.094          | 0.109           | -0.211          | -0.104          | 0.107           | -0.241          | -0.104          | 0.138           | 0.5000 |
| 0.6000                   | -0.156          | -0.089          | 0.067           | -0.166          | -0.094          | 0.073           | -0.198          | -0.094          | 0.105           | -0.204          | -0.104          | 0.100           | -0.186          |                 |                 | 0.6000 |
| 0.7000                   | -0.152          | -0.079          | 0.073           | -0.171          | -0.093          | 0.078           |                 | -0.107          | -0.177          | -0.111          | 0.067           | -0.190          |                 |                 |                 | 0.7000 |
| 0.8000                   | -0.089          | -0.087          | 0.003           | -0.108          | -0.088          | 0.020           | -0.124          | -0.097          | 0.027           | -0.148          | -0.111          | 0.037           |                 |                 |                 | 0.8000 |
| 1.0000                   | 0.211           | -0.158          | -0.368          | 0.224           | -0.068          | -0.292          | 0.034           | -0.008          | -0.042          | -0.079          | -0.094          | -0.015          | -0.555          | 0.228           | 0.784           | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.7^\circ$  - Continued

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| x/c                      | y/b=0.150                |                 |                 | y/b=0.300       |                 |                 | y/b=0.450       |                 |                 | y/b=0.600       |                 |                 | y/b=0.750       |                 |                 | x/c    |
|--------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
|                          | C <sub>pL</sub>          | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> | C <sub>pL</sub> | C <sub>pR</sub> | ΔC <sub>p</sub> |        |
|                          | M = 1.302      Q = 04.01 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | -0.025                   | -0.047          | -0.022          | -0.214          | -0.096          | 0.118           | -0.179          | 0.020           | 0.199           | -0.228          | -0.024          | 0.204           | -0.231          | -0.151          | 0.080           | 0.0000 |
| 0.0250                   | -0.196                   | -0.021          | 0.175           | -0.255          | -0.088          | 0.168           | -0.226          | -0.036          | 0.190           | -0.265          | -0.050          | 0.215           | -0.271          | -0.111          | 0.160           | 0.0250 |
| 0.0500                   | -0.291                   | -0.015          | 0.276           | -0.277          | -0.084          | 0.193           | -0.250          | -0.072          | 0.178           | -0.281          | -0.070          | 0.211           | -0.271          | -0.111          | 0.160           | 0.0500 |
| 0.1000                   | -0.254                   | -0.064          | 0.190           | -0.263          | -0.090          | 0.173           | -0.230          | -0.081          | 0.149           | -0.252          | -0.090          | 0.162           | -0.286          | -0.099          | 0.187           | 0.1000 |
| 0.1500                   | -0.230                   | -0.074          | 0.157           | -0.242          | -0.094          | 0.149           | -0.213          | -0.109          | 0.105           | -0.237          | -0.110          | 0.128           | -0.278          | -0.117          | 0.161           | 0.1500 |
| 0.2000                   | -0.224                   | -0.089          | 0.135           | -0.236          | -0.101          | 0.134           | -0.203          | -0.116          | 0.087           | -0.229          | -0.126          | 0.103           | -0.263          | -0.146          | 0.117           | 0.2000 |
| 0.3000                   | -0.225                   | -0.113          | 0.111           | -0.205          | -0.129          | 0.076           | -0.199          | -0.147          | 0.052           | -0.224          | -0.145          | 0.079           | -0.246          | -0.160          | 0.086           | 0.3000 |
| 0.4000                   | -0.216                   | -0.141          | 0.075           | -0.190          | -0.147          | 0.042           | -0.211          | -0.156          | 0.055           | -0.226          | -0.174          | 0.052           | -0.241          | -0.161          | 0.080           | 0.4000 |
| 0.5000                   | -0.203                   | -0.175          | 0.028           | -0.201          | -0.180          | 0.021           | -0.213          | -0.167          | 0.046           | -0.226          | -0.173          | 0.053           | -0.240          | -0.157          | 0.083           | 0.5000 |
| 0.6000                   | -0.180                   | -0.163          | 0.018           | -0.194          | -0.162          | 0.032           | -0.210          | -0.166          | 0.045           | -0.223          | -0.177          | 0.046           | -0.232          | -0.157          | 0.080           | 0.6000 |
| 0.7000                   | -0.173                   | -0.160          | 0.014           | -0.182          | -0.164          | 0.018           | -0.216          | -0.167          | 0.045           | -0.221          | -0.160          | 0.050           | -0.218          | -0.157          | 0.070           | 0.7000 |
| 0.8000                   | -0.081                   | -0.090          | -0.008          | -0.105          | -0.090          | 0.015           | -0.120          | -0.128          | -0.008          | -0.185          | -0.132          | 0.052           | -0.129          | -0.065          | 0.064           | 0.8000 |
| 1.0000                   | 0.360                    | 0.255           | -0.105          | 0.247           | 0.287           | 0.040           | 0.082           | 0.068           | -0.015          | -0.100          | -0.050          | 0.049           | -0.129          | -0.065          | 0.064           | 1.0000 |
| M = 1.301      Q = 08.06 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.512                    | 0.296           | -0.216          | -0.618          | 0.031           | 0.649           | -0.454          | -0.208          | 0.246           | -0.081          | -0.161          | -0.080          | -0.137          | -0.331          | -0.194          | 0.0000 |
| 0.0250                   | -0.202                   | 0.273           | 0.475           | -0.659          | 0.128           | 0.787           | -0.498          | -0.176          | 0.322           | -0.170          | -0.180          | -0.010          | -0.270          | -0.092          | 0.0250          | 0.0250 |
| 0.0500                   | -0.630                   | 0.242           | 0.872           | -0.682          | 0.176           | 0.859           | -0.515          | -0.156          | 0.359           | -0.229          | -0.189          | 0.039           | -0.178          | -0.270          | -0.092          | 0.0500 |
| 0.1000                   | -0.626                   | 0.155           | 0.781           | -0.678          | 0.127           | 0.806           | -0.470          | -0.158          | 0.312           | -0.257          | -0.181          | 0.076           | -0.215          | -0.229          | -0.014          | 0.1000 |
| 0.1500                   | -0.603                   | 0.144           | 0.747           | -0.646          | 0.104           | 0.751           | -0.429          | -0.168          | 0.261           | -0.265          | -0.167          | 0.097           | -0.248          | -0.209          | 0.039           | 0.1500 |
| 0.2000                   | -0.571                   | 0.145           | 0.716           | -0.575          | 0.064           | 0.639           | -0.404          | -0.181          | 0.223           | -0.265          | -0.172          | 0.093           | -0.247          | -0.188          | 0.059           | 0.2000 |
| 0.3000                   | -0.540                   | 0.104           | 0.644           | -0.445          | 0.004           | 0.441           | -0.363          | -0.203          | 0.160           | -0.249          | -0.174          | 0.075           | -0.244          | -0.182          | 0.062           | 0.3000 |
| 0.4000                   | -0.469                   | 0.049           | 0.519           | -0.373          | -0.075          | 0.298           | -0.305          | -0.221          | 0.085           | -0.247          | -0.173          | 0.075           | -0.241          | -0.174          | 0.067           | 0.4000 |
| 0.5000                   | -0.379                   | -0.028          | 0.351           | -0.316          | -0.098          | 0.218           | -0.267          | -0.204          | 0.064           | -0.245          | -0.167          | 0.078           | -0.243          | -0.127          | 0.116           | 0.5000 |
| 0.6000                   | -0.325                   | -0.044          | 0.281           | -0.279          | -0.099          | 0.180           | -0.219          | -0.192          | 0.028           | -0.217          | -0.154          | 0.063           | -0.230          | -0.180          | 0.060           | 0.6000 |
| 0.7000                   | -0.308                   | -0.075          | 0.233           | -0.211          | -0.112          | 0.099           | -0.155          | -0.155          | -0.163          | -0.128          | 0.035           | -0.180          | -0.130          | -0.030          | 0.130           | 0.7000 |
| 0.8000                   | -0.083                   | -0.027          | 0.056           | -0.142          | -0.045          | 0.097           | -0.056          | -0.118          | -0.062          | -0.096          | -0.116          | -0.020          | -0.130          | -0.030          | 0.130           | 0.8000 |
| 1.0000                   | 0.400                    | 0.311           | -0.089          | 0.005           | 0.334           | 0.329           | 0.197           | -0.043          | -0.240          | 0.074           | -0.137          | -0.210          | -0.130          | 0.130           | 0.160           | 1.0000 |
| M = 1.300      Q = 12.06 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.694                    | 0.173           | -0.521          | -0.635          | 0.174           | 0.809           | -0.626          | -0.154          | 0.472           | -0.674          | -0.230          | 0.444           | -0.295          | -0.283          | 0.012           | 0.0000 |
| 0.0250                   | -0.124                   | 0.133           | 0.257           | -0.658          | 0.130           | 0.788           | -0.683          | -0.119          | 0.564           | -0.656          | -0.264          | 0.392           | -0.318          | -0.251          | 0.067           | 0.0250 |
| 0.0500                   | -0.611                   | 0.096           | 0.707           | -0.666          | 0.100           | 0.767           | -0.717          | -0.099          | 0.617           | -0.634          | -0.289          | 0.345           | -0.318          | -0.251          | 0.067           | 0.0500 |
| 0.1000                   | -0.590                   | 0.035           | 0.625           | -0.635          | 0.090           | 0.725           | -0.712          | -0.103          | 0.608           | -0.577          | -0.309          | 0.268           | -0.326          | -0.231          | 0.095           | 0.1000 |
| 0.1500                   | -0.552                   | 0.000           | 0.552           | -0.616          | 0.071           | 0.687           | -0.666          | -0.122          | 0.544           | -0.515          | -0.329          | 0.186           | -0.318          | -0.221          | 0.096           | 0.1500 |
| 0.2000                   | -0.498                   | -0.008          | 0.490           | -0.574          | 0.042           | 0.616           | -0.599          | -0.137          | 0.462           | -0.451          | -0.340          | 0.112           | -0.305          | -0.206          | 0.098           | 0.2000 |
| 0.3000                   | -0.437                   | -0.032          | 0.405           | -0.515          | -0.031          | 0.484           | -0.505          | -0.161          | 0.345           | -0.402          | -0.340          | 0.062           | -0.289          | -0.189          | 0.104           | 0.3000 |
| 0.4000                   | -0.423                   | -0.045          | 0.378           | -0.471          | -0.091          | 0.380           | -0.430          | -0.176          | 0.254           | -0.369          | -0.331          | 0.038           | -0.286          | -0.194          | 0.089           | 0.4000 |
| 0.5000                   | -0.426                   | -0.076          | 0.351           | -0.470          | -0.107          | 0.363           | -0.407          | -0.173          | 0.235           | -0.347          | -0.276          | 0.071           | -0.284          | -0.194          | 0.089           | 0.5000 |
| 0.6000                   | -0.437                   | -0.079          | 0.359           | -0.441          | -0.105          | 0.336           | -0.387          | -0.149          | 0.237           | -0.340          | -0.282          | 0.058           | -0.281          | -0.194          | 0.089           | 0.6000 |
| 0.7000                   | -0.436                   | -0.083          | 0.353           | -0.410          | -0.040          | 0.370           | -0.370          | -0.081          | -0.306          | -0.284          | 0.022           | -0.264          | -0.281          | -0.194          | 0.089           | 0.7000 |
| 0.8000                   | -0.259                   | 0.052           | 0.311           | -0.218          | 0.011           | 0.229           | -0.174          | -0.079          | 0.094           | -0.172          | -0.286          | -0.114          | -0.286          | -0.200          | 0.328           | 0.8000 |
| 1.0000                   | 0.623                    | 0.743           | 0.120           | 0.646           | 0.068           | -0.578          | 0.267           | -0.278          | -0.546          | 0.401           | -0.288          | -0.689          | -0.128          | 0.200           | 0.328           | 1.0000 |
| M = 1.299      Q = 16.07 |                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |        |
| 0.0000                   | 0.786                    | 0.316           | -0.470          | -0.450          | 0.051           | 0.501           | -0.542          | -0.088          | 0.454           | -0.619          | -0.194          | 0.424           | -0.610          | -0.195          | 0.414           | 0.0000 |
| 0.0250                   | -0.110                   | 0.234           | 0.344           | -0.493          | 0.048           | 0.541           | -0.535          | -0.069          | 0.466           | -0.606          | -0.158          | 0.448           | -0.606          | -0.158          | 0.414           | 0.0250 |
| 0.0500                   | -0.647                   | 0.168           | 0.815           | -0.519          | 0.030           | 0.550           | -0.526          | -0.068          | 0.459           | -0.589          | -0.142          | 0.447           | -0.528          | -0.258          | 0.269           | 0.0500 |
| 0.1000                   | -0.647                   | 0.084           | 0.731           | -0.525          | -0.054          | 0.472           | -0.505          | -0.119          | 0.385           | -0.543          | -0.176          | 0.367           | -0.472          | -0.299          | 0.172           | 0.1000 |
| 0.1500                   | -0.639                   | -0.002          | 0.637           | -0.510          | -0.073          | 0.437           | -0.491          | -0.131          | 0.360           | -0.511          | -0.218          | 0.294           | -0.441          | -0.319          | 0.122           | 0.1500 |
| 0.2000                   | -0.620                   | -0.053          | 0.568           | -0.498          | -0.104          | 0.394           | -0.483          | -0.145          | 0.338           | -0.488          | -0.229          | 0.259           | -0.416          | -0.325          | 0.091           | 0.2000 |
| 0.3000                   | -0.592                   | -0.078          | 0.514           | -0.546          | -0.150          | 0.396           | -0.494          | -0.174          | 0.319           | -0.466          | -0.242          | 0.224           | -0.397          | -0.319          | 0.077           | 0.3000 |
| 0.4000                   | -0.582                   | -0.120          | 0.463           | -0.575          | -0.187          | 0.388           | -0.508          | -0.182          | 0.326           | -0.460          | -0.254          | 0.206           | -0.383          | -0.231          | 0.152           | 0.4000 |
| 0.5000                   | -0.582                   | -0.179          | 0.403           | -0.585          | -0.224          | 0.361           | -0.522          | -0.196          | 0.326           | -0.463          | -0.237          | 0.227           | -0.377          | -0.183          | 0.194           | 0.5000 |
| 0.6000                   | -0.579                   | -0.186          | 0.393           | -0.579          | -0.187          | 0.393           | -0.528          | -0.213          | 0.315           | -0.460          | -0.116          | 0.344           | -0.293          | -0.183          | 0.194           | 0.6000 |
| 0.7000                   | -0.561                   | -0.187          | 0.374           | -0.498          | -0.155          | 0.343           | -0.493          | -0.027          | -0.300          | -0.093          | 0.208           | -0.161          | -0.300          | -0.093          | 0.208           | 0.7000 |
| 0.8000                   | -0.357                   | 0.021           | 0.378           | -0.391          | 0.050           | 0.441           | -0.188          | -0.012          | 0.176           | -0.170          | -0.088          | 0.082           | -0.170          | -0.088          | 0.082           | 0.8000 |
| 1.0000                   | 0.608                    | 1.065           | 0.457           | -0.099          | 0.983           | 1.082           | 0.621           | -0.496          | -1.117          | 0.000           | -0.136          | -0.136          | 0.521           | -0.555          | -1.076          | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.7^\circ$  - Continued

| x/c                         | y/b=0.150       |                 |              | y/b=0.300       |                 |              | y/b=0.450       |                 |              | y/b=0.600       |                 |              | y/b=0.750       |                 |              | x/c    |
|-----------------------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|--------|
|                             | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ | C <sub>PL</sub> | C <sub>PR</sub> | $\Delta C_p$ |        |
| M = 2.227 $\alpha = -03.56$ |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                      | 0.576           | 0.301           | -0.274       | 0.095           | 0.278           | 0.182        | 0.072           | 0.380           | 0.307        | 0.070           | 0.339           | 0.269        | 0.117           | 0.215           | 0.099        | 0.0000 |
| 0.0250                      | 0.198           | 0.233           | 0.035        | 0.007           | 0.222           | 0.215        | 0.014           | 0.281           | 0.267        | 0.011           | 0.260           | 0.249        |                 |                 |              | 0.0250 |
| 0.0500                      | -0.036          | 0.180           | 0.216        | -0.047          | 0.181           | 0.228        | -0.027          | 0.209           | 0.236        | -0.029          | 0.210           | 0.239        | 0.009           | 0.199           | 0.190        | 0.0500 |
| 0.1000                      | -0.068          | 0.121           | 0.189        | -0.055          | 0.142           | 0.197        | -0.054          | 0.148           | 0.203        | -0.053          | 0.196           | 0.248        | -0.048          | 0.179           | 0.227        | 0.1000 |
| 0.1500                      | -0.072          | 0.113           | 0.185        | -0.067          | 0.123           | 0.190        | -0.064          | 0.139           | 0.203        | -0.058          | 0.153           | 0.211        | -0.054          | 0.157           | 0.211        | 0.1500 |
| 0.2000                      | -0.069          | 0.093           | 0.162        | -0.079          | 0.107           | 0.185        | -0.078          | 0.116           | 0.194        | -0.071          | 0.131           | 0.201        | -0.060          | 0.132           | 0.192        | 0.2000 |
| 0.3000                      | -0.066          | 0.071           | 0.197        | -0.087          | 0.071           | 0.158        | -0.091          | 0.080           | 0.171        | -0.079          | 0.102           | 0.182        | -0.064          | 0.108           | 0.172        | 0.3000 |
| 0.4000                      | -0.064          | 0.059           | 0.123        | -0.088          | 0.053           | 0.141        | -0.096          | 0.064           | 0.161        | -0.086          | 0.075           | 0.161        | -0.073          | 0.078           | 0.151        | 0.4000 |
| 0.5000                      | -0.065          | 0.046           | 0.111        | -0.083          | 0.043           | 0.127        | -0.099          | 0.051           | 0.151        | -0.085          | 0.058           | 0.143        | -0.078          | 0.076           | 0.154        | 0.5000 |
| 0.6000                      | -0.067          | 0.038           | 0.105        | -0.048          | 0.039           | 0.087        | -0.101          | 0.041           | 0.141        | -0.094          | 0.047           | 0.141        | -0.082          |                 |              | 0.6000 |
| 0.7000                      | -0.067          | 0.019           | 0.086        | -0.085          | 0.031           | 0.115        |                 | 0.033           |              | -0.097          | 0.034           | 0.131        | -0.086          |                 |              | 0.7000 |
| 0.8000                      | -0.065          | 0.011           | 0.077        | -0.080          | 0.020           | 0.101        | -0.088          | 0.013           | 0.101        | -0.095          | 0.010           | 0.105        |                 |                 |              | 0.8000 |
| 1.0000                      | -0.055          | 0.027           | 0.083        | 0.051           | -0.007          | -0.057       | -0.054          | -0.068          | -0.014       | -0.077          | -0.071          | 0.006        | -0.105          | 0.494           | 0.598        | 1.0000 |
| M = 2.231 $\alpha = 00.40$  |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                      | 0.560           | 0.071           | -0.490       | 0.092           | 0.137           | 0.046        | 0.035           | 0.299           | 0.264        | 0.019           | 0.133           | 0.113        | 0.070           | 0.132           | 0.062        | 0.0000 |
| 0.0250                      | 0.214           | 0.101           | -0.113       | 0.008           | 0.124           | 0.116        | 0.003           | 0.189           | 0.186        | -0.008          | 0.134           | 0.142        |                 |                 |              | 0.0250 |
| 0.0500                      | -0.007          | 0.109           | 0.116        | -0.046          | 0.111           | 0.157        | -0.023          | 0.116           | 0.139        | -0.031          | 0.129           | 0.160        | -0.013          | 0.114           | 0.127        | 0.0500 |
| 0.1000                      | -0.070          | 0.057           | 0.127        | -0.068          | 0.089           | 0.157        | -0.053          | 0.081           | 0.134        | -0.062          | 0.100           | 0.162        | -0.057          | 0.098           | 0.155        | 0.1000 |
| 0.1500                      | -0.079          | 0.031           | 0.111        | -0.076          | 0.057           | 0.133        | -0.067          | 0.067           | 0.134        | -0.073          | 0.071           | 0.144        | -0.064          | 0.084           | 0.148        | 0.1500 |
| 0.2000                      | -0.078          | 0.027           | 0.105        | -0.087          | 0.036           | 0.123        | -0.080          | 0.056           | 0.139        | -0.072          | 0.080           | 0.137        | -0.072          | 0.074           | 0.146        | 0.2000 |
| 0.3000                      | -0.079          | 0.016           | 0.095        | -0.098          | 0.019           | 0.117        | -0.091          | 0.022           | 0.113        | -0.086          | 0.043           | 0.129        | -0.078          | 0.046           | 0.123        | 0.3000 |
| 0.4000                      | -0.079          | 0.008           | 0.087        | -0.095          | 0.002           | 0.097        | -0.098          | 0.004           | 0.103        | -0.089          | 0.026           | 0.115        | -0.084          | 0.032           | 0.116        | 0.4000 |
| 0.5000                      | -0.081          | -0.004          | 0.077        | -0.096          | -0.005          | 0.091        | -0.106          | -0.002          | 0.104        | -0.100          | 0.008           | 0.109        | -0.089          | 0.027           | 0.116        | 0.5000 |
| 0.6000                      | -0.086          | -0.014          | 0.072        | -0.049          | -0.010          | 0.038        | -0.109          | -0.011          | 0.098        | -0.103          | -0.001          | 0.102        | -0.096          |                 |              | 0.6000 |
| 0.7000                      | -0.087          | -0.024          | 0.063        | -0.093          | -0.017          | 0.076        |                 | -0.024          |              | -0.105          | -0.020          | 0.085        | -0.097          |                 |              | 0.7000 |
| 0.8000                      | -0.084          | -0.033          | 0.051        | -0.094          | -0.030          | 0.064        | -0.101          | -0.034          | 0.067        | -0.105          | -0.025          | 0.080        |                 |                 |              | 0.8000 |
| 1.0000                      | -0.065          | -0.043          | 0.021        | 0.031           | -0.075          | -0.106       | -0.075          | -0.045          | 0.030        | -0.102          | 0.007           | 0.109        | -0.076          | 0.139           | 0.215        | 1.0000 |
| M = 2.231 $\alpha = 04.26$  |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                      | 0.667           | 0.237           | -0.430       | 0.077           | -0.055          | -0.132       | 0.083           | -0.073          | -0.156       | -0.029          | 0.138           | 0.166        | 0.049           | -0.068          | -0.117       | 0.0000 |
| 0.0250                      | 0.177           | 0.192           | 0.016        | 0.022           | -0.015          | -0.037       | 0.026           | -0.008          | -0.034       | -0.019          | 0.072           | 0.091        |                 |                 |              | 0.0250 |
| 0.0500                      | -0.124          | 0.153           | 0.277        | -0.018          | 0.007           | 0.025        | -0.014          | 0.023           | 0.037        | -0.018          | 0.029           | 0.047        | -0.023          | -0.002          | 0.020        | 0.0500 |
| 0.1000                      | -0.159          | 0.090           | 0.249        | -0.052          | -0.002          | 0.051        | -0.039          | -0.014          | 0.025        | -0.047          | 0.008           | 0.055        | -0.061          | 0.024           | 0.085        | 0.1000 |
| 0.1500                      | -0.164          | 0.050           | 0.214        | -0.075          | -0.006          | 0.058        | -0.054          | -0.015          | 0.038        | -0.061          | -0.003          | 0.059        | -0.067          | 0.011           | 0.078        | 0.1500 |
| 0.2000                      | -0.160          | 0.030           | 0.191        | -0.095          | -0.009          | 0.086        | -0.073          | -0.019          | 0.054        | -0.072          | -0.010          | 0.062        | -0.074          | -0.004          | 0.070        | 0.2000 |
| 0.3000                      | -0.148          | 0.010           | 0.157        | -0.117          | -0.026          | 0.092        | -0.094          | -0.030          | 0.063        | -0.080          | -0.026          | 0.055        | -0.077          | -0.021          | 0.056        | 0.3000 |
| 0.4000                      | -0.135          | -0.007          | 0.128        | -0.123          | -0.031          | 0.093        | -0.108          | -0.041          | 0.067        | -0.092          | -0.037          | 0.055        | -0.087          | -0.031          | 0.056        | 0.4000 |
| 0.5000                      | -0.125          | -0.024          | 0.101        | -0.125          | -0.041          | 0.084        | -0.116          | -0.044          | 0.071        | -0.100          | -0.045          | 0.054        | -0.093          | -0.016          | 0.076        | 0.5000 |
| 0.6000                      | -0.119          | -0.040          | 0.079        | -0.078          | -0.041          | 0.036        | -0.123          | -0.045          | 0.078        | -0.109          | -0.047          | 0.063        | -0.097          |                 |              | 0.6000 |
| 0.7000                      | -0.114          | -0.052          | 0.063        | -0.118          | -0.052          | 0.066        |                 | -0.053          |              | -0.116          | -0.055          | 0.061        | -0.099          |                 |              | 0.7000 |
| 0.8000                      | -0.110          | -0.062          | 0.048        | -0.125          | -0.063          | 0.051        | 0.020           | -0.070          | 0.051        | -0.108          | -0.056          | 0.054        |                 |                 |              | 0.8000 |
| 1.0000                      | -0.103          | -0.080          | 0.023        | -0.037          | -0.090          | -0.053       | 0.371           | -0.130          | -0.502       | -0.109          | -0.081          | 0.028        | -0.101          | 0.436           | 0.537        | 1.0000 |
| M = 2.243 $\alpha = 08.31$  |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |                 |                 |              |        |
| 0.0000                      | 0.339           | 0.151           | -0.188       | -0.028          | 0.018           | 0.046        | -0.023          | -0.079          | -0.056       | 0.046           | -0.119          | -0.165       | 0.027           | -0.101          | -0.127       | 0.0000 |
| 0.0250                      | 0.026           | 0.113           | 0.087        | -0.098          | 0.032           | 0.130        | -0.082          | -0.079          | 0.003        | -0.005          | -0.104          | -0.099       |                 |                 |              | 0.0250 |
| 0.0500                      | -0.163          | 0.081           | 0.244        | -0.141          | 0.016           | 0.176        | -0.120          | -0.082          | 0.038        | -0.040          | -0.094          | -0.094       | -0.025          | -0.099          | -0.074       | 0.0500 |
| 0.1000                      | -0.168          | 0.035           | 0.203        | -0.145          | 0.011           | 0.156        | -0.131          | -0.095          | 0.036        | -0.066          | -0.091          | -0.025       | -0.054          | -0.096          | -0.043       | 0.1000 |
| 0.1500                      | -0.173          | 0.019           | 0.192        | -0.149          | 0.002           | 0.151        | -0.131          | -0.101          | 0.031        | -0.084          | -0.087          | -0.003       | -0.060          | -0.093          | -0.034       | 0.1500 |
| 0.2000                      | -0.172          | 0.012           | 0.184        | -0.152          | -0.007          | 0.145        | -0.134          | -0.108          | 0.026        | -0.096          | -0.079          | 0.017        | -0.068          | -0.091          | -0.023       | 0.2000 |
| 0.3000                      | -0.169          | -0.014          | 0.155        | -0.156          | -0.028          | 0.128        | -0.138          | -0.114          | 0.024        | -0.103          | -0.078          | 0.025        | -0.082          | -0.088          | -0.006       | 0.3000 |
| 0.4000                      | -0.165          | -0.020          | 0.145        | -0.162          | -0.044          | 0.118        | -0.142          | -0.117          | 0.026        | -0.110          | -0.080          | 0.030        | -0.093          | -0.086          | 0.006        | 0.4000 |
| 0.5000                      | -0.165          | -0.027          | 0.138        | -0.159          | -0.050          | 0.110        | -0.144          | -0.116          | 0.028        | -0.120          | -0.084          | 0.036        | -0.100          | -0.049          | 0.051        | 0.5000 |
| 0.6000                      | -0.163          | -0.040          | 0.121        | -0.104          | -0.059          | 0.095        | -0.145          | -0.115          | 0.031        | -0.126          | -0.086          | 0.040        | -0.107          |                 |              | 0.6000 |
| 0.7000                      | -0.158          | -0.047          | 0.111        | -0.148          | -0.068          | 0.080        |                 | -0.127          |              | -0.127          | -0.098          | 0.031        | -0.113          |                 |              | 0.7000 |
| 0.8000                      | -0.150          | -0.057          | 0.093        | -0.158          | -0.084          | 0.073        | -0.100          | -0.120          | -0.019       | -0.129          | -0.106          | 0.023        |                 |                 |              | 0.8000 |
| 1.0000                      | -0.116          | -0.084          | 0.033        | -0.167          | -0.098          | 0.069        | -0.052          | -0.137          | -0.085       | -0.133          | -0.136          | -0.003       | -0.121          | 0.295           | 0.416        | 1.0000 |



TABLE VII.- PRESSURE COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $(x/c)_V$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Concluded  
(c) BVWC;  $\delta = 10.7^\circ$  - Concluded

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| x/c                      | y/b=0.150                |                 |        | y/b=0.300       |                 |        | y/b=0.450       |                 |        | y/b=0.600       |                 |        | y/b=0.750       |                 |        | x/c    |
|--------------------------|--------------------------|-----------------|--------|-----------------|-----------------|--------|-----------------|-----------------|--------|-----------------|-----------------|--------|-----------------|-----------------|--------|--------|
|                          | Cp <sub>L</sub>          | Cp <sub>R</sub> | ΔCp    | Cp <sub>L</sub> | Cp <sub>R</sub> | ΔCp    | Cp <sub>L</sub> | Cp <sub>R</sub> | ΔCp    | Cp <sub>L</sub> | Cp <sub>R</sub> | ΔCp    | Cp <sub>L</sub> | Cp <sub>R</sub> | ΔCp    |        |
|                          | M = 2.235      Q = 12.36 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
| 0.0000                   | 0.412                    | 0.111           | -0.302 | -0.007          | 0.024           | 0.031  | -0.105          | 0.037           | 0.142  | -0.098          | -0.133          | -0.035 | -0.047          | -0.137          | -0.090 | 0.0000 |
| 0.0250                   | 0.052                    | 0.105           | 0.052  | -0.074          | -0.006          | 0.068  | -0.105          | -0.005          | 0.100  | -0.114          | -0.105          | 0.009  |                 |                 |        | 0.0250 |
| 0.0500                   | -0.167                   | 0.088           | 0.255  | -0.116          | -0.026          | 0.090  | -0.109          | -0.036          | 0.074  | -0.125          | -0.091          | 0.035  | -0.085          | -0.138          | -0.053 | 0.0500 |
| 0.1000                   | -0.181                   | 0.025           | 0.206  | -0.123          | -0.035          | 0.088  | -0.133          | -0.062          | 0.072  | -0.133          | -0.103          | 0.030  | -0.105          | -0.137          | -0.031 | 0.1000 |
| 0.1500                   | -0.193                   | -0.010          | 0.183  | -0.137          | -0.044          | 0.093  | -0.140          | -0.069          | 0.072  | -0.137          | -0.105          | 0.032  | -0.108          | -0.133          | -0.026 | 0.1500 |
| 0.2000                   | -0.190                   | -0.028          | 0.162  | -0.148          | -0.056          | 0.092  | -0.144          | -0.073          | 0.071  | -0.142          | -0.110          | 0.032  | -0.114          | -0.132          | -0.018 | 0.2000 |
| 0.3000                   | -0.191                   | -0.049          | 0.143  | -0.158          | -0.070          | 0.088  | -0.155          | -0.078          | 0.077  | -0.142          | -0.119          | 0.023  | -0.118          | -0.132          | -0.015 | 0.3000 |
| 0.4000                   | -0.191                   | -0.071          | 0.121  | -0.163          | -0.079          | 0.085  | -0.155          | -0.088          | 0.067  | -0.142          | -0.124          | 0.018  | -0.121          | -0.135          | -0.013 | 0.4000 |
| 0.5000                   | -0.189                   | -0.080          | 0.109  | -0.166          | -0.084          | 0.082  | -0.162          | -0.094          | 0.067  | -0.144          | -0.130          | 0.014  | -0.126          | -0.092          | 0.034  | 0.5000 |
| 0.6000                   | -0.181                   | -0.091          | 0.090  | -0.138          | -0.090          | 0.048  | -0.165          | -0.097          | 0.068  | -0.153          | -0.129          | 0.024  | -0.128          |                 |        | 0.6000 |
| 0.7000                   | -0.178                   | -0.095          | 0.082  | -0.166          | -0.095          | 0.070  | -0.152          | -0.102          |        | -0.154          | -0.137          | 0.017  | -0.129          |                 |        | 0.7000 |
| 0.8000                   | -0.174                   | -0.098          | 0.076  | -0.170          | -0.099          | 0.071  | -0.159          | -0.113          | 0.046  | -0.152          | -0.145          | 0.007  |                 |                 |        | 0.8000 |
| 1.0000                   | -0.166                   | -0.098          | 0.068  | -0.108          | -0.101          | 0.007  | -0.138          | -0.153          | -0.014 | -0.140          | -0.160          | -0.021 | -0.136          | 0.798           | 0.934  | 1.0000 |
| M = 2.235      Q = 16.42 |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
| 0.0000                   | 0.427                    | -0.144          | -0.571 | -0.074          | -0.176          | -0.101 | 0.000           | -0.120          | -0.121 | -0.060          | -0.114          | -0.054 | -0.067          | -0.142          | -0.075 | 0.0000 |
| 0.0250                   | 0.037                    | -0.125          | -0.162 | -0.132          | -0.149          | -0.017 | -0.051          | -0.131          | -0.080 | -0.071          | -0.125          | -0.055 |                 |                 |        | 0.0250 |
| 0.0500                   | -0.195                   | -0.116          | 0.079  | -0.169          | -0.134          | 0.035  | -0.086          | -0.138          | -0.052 | -0.081          | -0.133          | -0.052 | -0.099          | -0.135          | -0.036 | 0.0500 |
| 0.1000                   | -0.187                   | -0.132          | 0.055  | -0.180          | -0.136          | 0.044  | -0.107          | -0.139          | -0.032 | -0.102          | -0.137          | -0.035 | -0.117          | -0.132          | -0.015 | 0.1000 |
| 0.1500                   | -0.204                   | -0.137          | 0.068  | -0.181          | -0.143          | 0.038  | -0.120          | -0.133          | -0.013 | -0.114          | -0.137          | -0.022 | -0.121          | -0.132          | -0.012 | 0.1500 |
| 0.2000                   | -0.204                   | -0.139          | 0.065  | -0.183          | -0.157          | 0.027  | -0.135          | -0.131          | 0.003  | -0.125          | -0.136          | -0.011 | -0.125          | -0.135          | -0.010 | 0.2000 |
| 0.3000                   | -0.204                   | -0.141          | 0.063  | -0.186          | -0.161          | 0.024  | -0.152          | -0.126          | 0.025  | -0.135          | -0.133          | 0.002  | -0.133          | -0.139          | -0.006 | 0.3000 |
| 0.4000                   | -0.204                   | -0.136          | 0.068  | -0.189          | -0.169          | 0.021  | -0.162          | -0.127          | 0.035  | -0.146          | -0.134          | 0.012  | -0.139          | -0.141          | -0.002 | 0.4000 |
| 0.5000                   | -0.204                   | -0.132          | 0.072  | -0.190          | -0.169          | 0.021  | -0.168          | -0.130          | 0.038  | -0.155          | -0.135          | 0.020  | -0.145          | -0.091          | 0.054  | 0.5000 |
| 0.6000                   | -0.200                   | -0.123          | 0.077  | -0.127          | -0.167          | -0.039 | -0.175          | -0.138          | 0.037  | -0.157          | -0.134          | 0.024  | -0.152          |                 |        | 0.6000 |
| 0.7000                   | -0.197                   | -0.119          | 0.078  | -0.169          | -0.168          | 0.002  | -0.140          |                 |        | -0.162          | -0.133          | 0.029  | -0.154          |                 |        | 0.7000 |
| 0.8000                   | -0.182                   | -0.101          | 0.080  | -0.192          | -0.162          | 0.030  | -0.146          | -0.123          | 0.022  | -0.167          | -0.130          | 0.037  |                 |                 |        | 0.8000 |
| 1.0000                   | -0.116                   | -0.025          | 0.091  | -0.180          | -0.134          | 0.046  | -0.059          | -0.035          | 0.024  | -0.172          | -0.114          | 0.058  | -0.138          | 0.942           | 1.080  | 1.0000 |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |
|                          |                          |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |                 |                 |        |        |



TABLE VIII.- SECTION COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $x/l$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION  
(a) BVW

| $x/l$                          | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                         | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                         | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                         | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                          | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                         | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                         | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                         | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                         | $C_{N_B}$ | $C_{Y_B}$ | $x/l$  | $C_{N_B}$ | $C_{Y_B}$ | $x/l$  | $C_{N_B}$ | $C_{Y_B}$ |
|--------------------------------|-----------|-----------|-------------------------------|-----------|-----------|-------------------------------|-----------|-----------|-------------------------------|-----------|-----------|--------------------------------|-----------|-----------|-------------------------------|-----------|-----------|-------------------------------|-----------|-----------|-------------------------------|-----------|-----------|-------------------------------|-----------|-----------|--------|-----------|-----------|--------|-----------|-----------|
| M = 0.701<br>$\alpha = -0.428$ |           |           | M = 0.701<br>$\alpha = 07.66$ |           |           | M = 0.904<br>$\alpha = 03.78$ |           |           | M = 1.049<br>$\alpha = 03.98$ |           |           | M = 1.302<br>$\alpha = -00.15$ |           |           | M = 1.302<br>$\alpha = 11.89$ |           |           | M = 1.703<br>$\alpha = 03.78$ |           |           | M = 2.237<br>$\alpha = 00.20$ |           |           | M = 2.233<br>$\alpha = 12.19$ |           |           |        |           |           |        |           |           |
| 0.0000                         | -0.0033   | -0.0006   | 0.0000                        | 0.0075    | -0.010    | 0.0000                        | 0.040     | -0.008    | 0.0000                        | 0.039     | -0.012    | 0.0000                         | -0.015    | 0.004     | 0.0000                        | 0.099     | -0.019    | 0.0000                        | 0.037     | -0.024    | 0.0000                        | -0.001    | -0.032    | 0.0000                        | -0.001    | -0.032    | 0.0000 | 0.092     | -0.033    | 0.0000 | 0.083     | -0.002    |
| 0.0500                         | -0.026    | 0.001     | 0.0500                        | 0.054     | -0.001    | 0.0500                        | 0.028     | 0.000     | 0.0500                        | 0.028     | 0.001     | 0.0500                         | -0.002    | 0.003     | 0.0500                        | 0.077     | -0.002    | 0.0500                        | 0.030     | -0.002    | 0.0500                        | 0.002     | -0.001    | 0.0500                        | 0.002     | -0.001    | 0.0500 | 0.083     | -0.002    | 0.0500 | 0.071     | 0.006     |
| 0.1000                         | -0.020    | 0.002     | 0.1000                        | 0.062     | 0.001     | 0.1000                        | 0.022     | 0.002     | 0.1000                        | 0.022     | 0.003     | 0.1000                         | 0.003     | 0.001     | 0.1000                        | 0.064     | 0.002     | 0.1000                        | 0.023     | 0.005     | 0.1000                        | 0.003     | 0.008     | 0.1000                        | 0.003     | 0.008     | 0.1000 | 0.061     | -0.002    | 0.1000 | 0.049     | -0.002    |
| 0.1353                         | -0.017    | -0.000    | 0.1353                        | 0.039     | -0.001    | 0.1353                        | 0.021     | -0.001    | 0.1353                        | 0.019     | -0.001    | 0.1353                         | 0.000     | -0.000    | 0.1353                        | 0.061     | -0.002    | 0.1353                        | 0.018     | 0.000     | 0.1353                        | 0.002     | -0.000    | 0.1353                        | 0.002     | -0.000    | 0.1353 | 0.061     | -0.002    | 0.1353 | 0.049     | -0.002    |
| 0.2090                         | -0.015    | 0.001     | 0.2090                        | 0.030     | -0.001    | 0.2090                        | 0.015     | 0.000     | 0.2090                        | 0.012     | 0.000     | 0.2090                         | 0.000     | -0.001    | 0.2090                        | 0.044     | -0.002    | 0.2090                        | 0.013     | 0.000     | 0.2090                        | 0.001     | 0.000     | 0.2090                        | 0.001     | 0.000     | 0.2090 | 0.043     | -0.002    | 0.2090 | 0.046     | -0.002    |
| 0.2500                         | -0.013    | -0.000    | 0.2500                        | 0.027     | -0.001    | 0.2500                        | 0.013     | -0.000    | 0.2500                        | 0.009     | 0.001     | 0.2500                         | -0.001    | 0.001     | 0.2500                        | 0.040     | -0.002    | 0.2500                        | 0.014     | -0.002    | 0.2500                        | 0.001     | 0.000     | 0.2500                        | 0.001     | 0.000     | 0.2500 | 0.046     | -0.002    | 0.2500 | 0.043     | -0.002    |
| 0.3000                         | -0.012    | 0.000     | 0.3000                        | 0.024     | -0.000    | 0.3000                        | 0.012     | 0.000     | 0.3000                        | 0.012     | 0.002     | 0.3000                         | -0.000    | 0.001     | 0.3000                        | 0.035     | -0.001    | 0.3000                        | 0.012     | -0.001    | 0.3000                        | 0.000     | 0.000     | 0.3000                        | 0.000     | 0.000     | 0.3000 | 0.043     | -0.002    | 0.3000 | 0.041     | -0.001    |
| 0.3500                         | -0.012    | -0.000    | 0.3500                        | 0.025     | -0.000    | 0.3500                        | 0.011     | 0.000     | 0.3500                        | 0.018     | -0.002    | 0.3500                         | 0.001     | 0.000     | 0.3500                        | 0.030     | -0.002    | 0.3500                        | 0.011     | 0.001     | 0.3500                        | -0.001    | 0.000     | 0.3500                        | 0.000     | 0.000     | 0.3500 | 0.041     | -0.001    | 0.3500 | 0.037     | -0.001    |
| 0.4000                         | -0.014    | -0.000    | 0.4000                        | 0.033     | -0.001    | 0.4000                        | 0.010     | -0.000    | 0.4000                        | 0.013     | -0.001    | 0.4000                         | 0.001     | -0.002    | 0.4000                        | 0.028     | -0.001    | 0.4000                        | 0.008     | -0.000    | 0.4000                        | -0.000    | -0.000    | 0.4000                        | 0.000     | -0.000    | 0.4000 | 0.037     | -0.001    | 0.4000 | 0.036     | -0.001    |
| 0.4500                         | -0.035    | 0.003     | 0.4500                        | 0.082     | -0.005    | 0.4500                        | 0.036     | -0.001    | 0.4500                        | 0.026     | -0.000    | 0.4500                         | -0.001    | 0.002     | 0.4500                        | 0.043     | -0.001    | 0.4500                        | 0.008     | -0.001    | 0.4500                        | 0.002     | 0.000     | 0.4500                        | 0.002     | 0.000     | 0.4500 | 0.036     | -0.001    | 0.4500 | 0.036     | -0.001    |
| 0.5000                         | -0.044    | 0.002     | 0.5000                        | 0.101     | -0.018    | 0.5000                        | 0.046     | -0.011    | 0.5000                        | 0.046     | -0.002    | 0.5000                         | 0.004     | 0.010     | 0.5000                        | 0.083     | -0.002    | 0.5000                        | 0.020     | 0.003     | 0.5000                        | 0.003     | -0.005    | 0.5000                        | 0.003     | -0.005    | 0.5000 | 0.046     | -0.008    | 0.5000 | 0.046     | -0.008    |
| 0.5950                         | -0.046    | 0.002     | 0.5950                        | 0.107     | -0.002    | 0.5950                        | 0.055     | 0.002     | 0.5950                        | 0.044     | 0.000     | 0.5950                         | 0.004     | 0.004     | 0.5950                        | 0.132     | -0.002    | 0.5950                        | 0.031     | -0.001    | 0.5950                        | 0.006     | 0.000     | 0.5950                        | 0.006     | 0.000     | 0.5950 | 0.046     | -0.001    | 0.5950 | 0.046     | -0.001    |
| 0.7050                         | -0.041    | 0.002     | 0.7050                        | 0.083     | -0.001    | 0.7050                        | 0.053     | -0.001    | 0.7050                        | 0.048     | -0.003    | 0.7050                         | -0.002    | 0.002     | 0.7050                        | 0.135     | -0.001    | 0.7050                        | 0.034     | -0.001    | 0.7050                        | 0.002     | 0.000     | 0.7050                        | 0.002     | 0.000     | 0.7050 | 0.046     | -0.001    | 0.7050 | 0.046     | -0.001    |
| 0.8000                         | -0.025    | 0.002     | 0.8000                        | 0.061     | -0.001    | 0.8000                        | 0.044     | 0.001     | 0.8000                        | 0.053     | 0.002     | 0.8000                         | 0.003     | 0.000     | 0.8000                        | 0.141     | -0.002    | 0.8000                        | 0.032     | -0.003    | 0.8000                        | 0.005     | -0.000    | 0.8000                        | 0.005     | -0.000    | 0.8000 | 0.046     | -0.001    | 0.8000 | 0.046     | -0.001    |
| 0.9000                         | -0.006    | -0.001    | 0.9000                        | 0.021     | -0.001    | 0.9000                        | 0.014     | -0.000    | 0.9000                        | 0.007     | -0.000    | 0.9000                         | -0.003    | -0.002    | 0.9000                        | 0.103     | -0.002    | 0.9000                        | 0.032     | 0.001     | 0.9000                        | 0.004     | 0.000     | 0.9000                        | 0.004     | 0.000     | 0.9000 | 0.046     | -0.001    | 0.9000 | 0.046     | -0.001    |
| 0.9500                         | -0.002    | 0.000     | 0.9500                        | 0.009     | 0.000     | 0.9500                        | 0.003     | 0.001     | 0.9500                        | 0.004     | 0.001     | 0.9500                         | 0.000     | -0.001    | 0.9500                        | 0.050     | -0.001    | 0.9500                        | 0.021     | 0.001     | 0.9500                        | 0.004     | 0.000     | 0.9500                        | 0.004     | 0.000     | 0.9500 | 0.046     | -0.001    | 0.9500 | 0.046     | -0.001    |
| 0.9900                         | -0.004    | -0.000    | 0.9900                        | 0.005     | 0.000     | 0.9900                        | 0.003     | 0.000     | 0.9900                        | 0.003     | 0.000     | 0.9900                         | -0.007    | 0.001     | 0.9900                        | 0.002     | -0.002    | 0.9900                        | 0.007     | 0.000     | 0.9900                        | 0.001     | -0.000    | 0.9900                        | 0.001     | -0.000    | 0.9900 | 0.046     | -0.001    | 0.9900 | 0.046     | -0.001    |
| 1.0000                         | -0.005    | -0.000    | 1.0000                        | 0.005     | 0.000     | 1.0000                        | 0.005     | -0.000    | 1.0000                        | 0.005     | -0.012    | 1.0000                         | 0.003     | -0.003    | 1.0000                        | 0.000     | -0.001    | 1.0000                        | 0.003     | -0.000    | 1.0000                        | -0.001    | -0.000    | 1.0000                        | -0.001    | -0.000    | 1.0000 | 0.046     | -0.001    | 1.0000 | 0.046     | -0.001    |
| M = 0.698<br>$\alpha = -00.20$ |           |           | M = 0.697<br>$\alpha = 11.79$ |           |           | M = 0.951<br>$\alpha = 03.87$ |           |           | M = 1.103<br>$\alpha = 03.98$ |           |           | M = 1.303<br>$\alpha = 03.88$  |           |           | M = 1.302<br>$\alpha = 15.87$ |           |           | M = 1.908<br>$\alpha = 03.93$ |           |           | M = 2.235<br>$\alpha = 06.18$ |           |           | M = 2.227<br>$\alpha = 16.22$ |           |           |        |           |           |        |           |           |
| 0.0000                         | 0.004     | -0.007    | 0.0000                        | 0.110     | -0.016    | 0.0000                        | 0.041     | -0.011    | 0.0000                        | 0.036     | -0.009    | 0.0000                         | 0.036     | -0.012    | 0.0000                        | 0.106     | -0.019    | 0.0000                        | 0.024     | -0.012    | 0.0000                        | 0.024     | -0.037    | 0.0000                        | 0.024     | -0.037    | 0.0000 | 0.118     | -0.033    | 0.0000 | 0.114     | -0.033    |
| 0.0500                         | 0.002     | 0.001     | 0.0500                        | 0.081     | -0.003    | 0.0500                        | 0.028     | 0.000     | 0.0500                        | 0.028     | 0.000     | 0.0500                         | 0.025     | 0.001     | 0.0500                        | 0.110     | -0.003    | 0.0500                        | 0.027     | 0.000     | 0.0500                        | 0.026     | -0.002    | 0.0500                        | 0.026     | -0.002    | 0.0500 | 0.114     | -0.033    | 0.0500 | 0.102     | 0.005     |
| 0.1000                         | 0.001     | 0.002     | 0.1000                        | 0.063     | 0.000     | 0.1000                        | 0.022     | 0.002     | 0.1000                        | 0.022     | 0.002     | 0.1000                         | 0.020     | 0.004     | 0.1000                        | 0.099     | 0.000     | 0.1000                        | 0.023     | 0.004     | 0.1000                        | 0.024     | 0.008     | 0.1000                        | 0.024     | 0.008     | 0.1000 | 0.063     | 0.000     | 0.1000 | 0.063     | 0.000     |
| 0.1353                         | 0.002     | -0.000    | 0.1353                        | 0.057     | -0.003    | 0.1353                        | 0.021     | -0.001    | 0.1353                        | 0.021     | -0.002    | 0.1353                         | 0.021     | -0.001    | 0.1353                        | 0.081     | -0.004    | 0.1353                        | 0.017     | 0.002     | 0.1353                        | 0.019     | -0.000    | 0.1353                        | 0.019     | -0.000    | 0.1353 | 0.057     | -0.003    | 0.1353 | 0.057     | -0.003    |
| 0.2090                         | 0.001     | 0.001     | 0.2090                        | 0.045     | -0.002    | 0.2090                        | 0.016     | -0.001    | 0.2090                        | 0.015     | -0.001    | 0.2090                         | 0.014     | 0.000     | 0.2090                        | 0.064     | -0.003    | 0.2090                        | 0.015     | 0.000     | 0.2090                        | 0.015     | 0.000     | 0.2090                        | 0.015     | 0.000     | 0.2090 | 0.045     | -0.002    | 0.2090 | 0.045     | -0.002    |
| 0.2500                         | 0.001     | 0.000     | 0.2500                        | 0.041     | -0.002    | 0.2500                        | 0.013     | -0.000    | 0.2500                        | 0.010     | -0.000    | 0.2500                         | 0.012     | 0.000     | 0.2500                        | 0.059     | -0.004    | 0.2500                        | 0.011     | -0.000    | 0.2500                        | 0.013     | -0.000    | 0.2500                        | 0.013     | -0.000    | 0.2500 | 0.041     | -0.002    | 0.2500 | 0.041     | -0.002    |
| 0.3000                         | 0.000     | 0.001     | 0.3000                        | 0.037     | -0.001    | 0.3000                        | 0.012     | 0.000     | 0.3000                        | 0.008     | -0.001    | 0.3000                         | 0.013     | 0.000     | 0.3000                        | 0.051     | -0.003    | 0.3000                        | 0.009     | 0.000     | 0.3000                        | 0.012     | 0.000     | 0.3000                        | 0.012     | 0.000     | 0.3000 | 0.037     | -0.001    | 0.3000 | 0.037     | -0.001    |
| 0.3500                         | 0.002     | 0.000     | 0.3500                        | 0.038     | -0.001    | 0.3500                        | 0.009     | 0.000     | 0.3500                        | 0.011     | 0.001     | 0.3500                         | 0.007     | -0.001    | 0.3500                        | 0.047     | -0.002    | 0.3500                        | 0.012     | -0.000    | 0.3500                        | 0.010     | 0.001     | 0.3500                        | 0.010     | 0.001     | 0.3500 | 0.038     | -0.001    | 0.3500 | 0.038     | -0.001    |
| 0.4000                         | 0.002     | 0.000     | 0.4000                        | 0.050     | -0.002    | 0.4000                        | 0.007     | -0.000    | 0.4000                        | 0.010     | 0.000     | 0.4000                         | 0.008     | -0.002    | 0.4000                        | 0.042     | -0.001    | 0.4000                        | 0.009     | 0.000     | 0.4000                        | 0.009     | -0.000    | 0.4000                        | 0.009     | -0.000    | 0.4000 | 0.050     | -0.002    | 0.4000 | 0.050     | -0.002    |
| 0.4500                         | 0.003     | 0.001     | 0.4500                        | 0.129     | -0.008    | 0.4500                        | 0.034     | -0.001    | 0.4500                        | 0.009     | 0.003     | 0.4500                         | 0.013     | 0.001     | 0.4500                        | 0.058     | -0.004    | 0.4500                        | 0.012     | 0.001     | 0.4500                        | 0.011     | -0.000    | 0.4500                        | 0.011     | -0.000    | 0.4500 | 0.129     | -0.008    | 0.4500 | 0.129     | -0.008    |
| 0.5000                         | 0.002     | -0.005    | 0.5000                        | 0.162     | -0.026    | 0.5000                        | 0.044     | -0.008    | 0.5000                        | 0.038     | 0.007     | 0.5000                         | 0.031     | 0.007     | 0.5000                        | 0.106     | -0.004    | 0.5000                        | 0.019     | 0.002     | 0.5000                        | 0.013     | -0.011    | 0.5000                        | 0.013     | -0.011    | 0.5000 | 0.162     | -0.026    | 0.5000 | 0.162     | -0.026    |
| 0.5950                         | 0.003     | 0.001     | 0.5950                        | 0.161     | -0.003    | 0.5950                        | 0.055     | 0.001     | 0.5950                        | 0.054     | -0.004    | 0.5950                         | 0.041     | -0.00     |                               |           |           |                               |           |           |                               |           |           |                               |           |           |        |           |           |        |           |           |



TABLE VIII.- SECTION COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(b) BVWC;  $\delta = -0.5^\circ$

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| x/l                     | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                     | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l    | C <sub>NB</sub> | C <sub>YB</sub> |
|-------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|-------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|--------|-----------------|-----------------|
| M = 0.700<br>α = -0.428 |                 |                 | M = 0.695<br>α = 07.85 |                 |                 | M = 0.905<br>α = 03.73 |                 |                 | M = 1.044<br>α = 03.88 |                 |                 | M = 1.299<br>α = -00.20 |                 |                 | M = 1.296<br>α = 11.79 |                 |                 | M = 1.698<br>α = 03.83 |                 |                 | M = 2.233<br>α = 00.15 |                 |                 | M = 2.231<br>α = 12.24 |                 |                 |        |                 |                 |
| 0.0000                  | 0.013           | -0.008          | 0.0000                 | -0.048          | -0.023          | 0.0000                 | -0.013          | -0.015          | 0.0000                 | -0.013          | -0.025          | 0.0000                  | -0.010          | -0.002          | 0.0000                 | 0.015           | 0.003           | 0.0000                 | 0.031           | -0.026          | 0.0000                 | 0.002           | -0.025          | 0.0000                 | 0.078           | -0.023          | 0.0000 | 0.013           | -0.008          |
| 0.0500                  | -0.029          | 0.002           | 0.0500                 | 0.060           | -0.004          | 0.0500                 | 0.027           | -0.002          | 0.0500                 | 0.028           | -0.002          | 0.0500                  | -0.001          | 0.003           | 0.0500                 | 0.076           | -0.002          | 0.0500                 | 0.027           | -0.003          | 0.0500                 | 0.002           | -0.001          | 0.0500                 | 0.083           | -0.002          | 0.0500 | -0.001          | 0.002           |
| 0.1000                  | -0.050          | 0.004           | 0.1000                 | 0.108           | -0.000          | 0.1000                 | 0.048           | 0.000           | 0.1000                 | 0.046           | 0.001           | 0.1000                  | 0.001           | 0.001           | 0.1000                 | 0.121           | -0.002          | 0.1000                 | 0.030           | 0.003           | 0.1000                 | 0.002           | 0.006           | 0.1000                 | 0.088           | 0.000           | 0.1000 | 0.001           | 0.001           |
| 0.1353                  | -0.052          | 0.001           | 0.1353                 | 0.106           | -0.006          | 0.1353                 | 0.051           | -0.005          | 0.1353                 | 0.045           | -0.009          | 0.1353                  | -0.002          | -0.002          | 0.1353                 | 0.142           | 0.002           | 0.1353                 | 0.036           | -0.005          | 0.1353                 | 0.002           | -0.001          | 0.1353                 | 0.092           | -0.003          | 0.1353 | 0.001           | 0.001           |
| 0.2090                  | -0.027          | 0.002           | 0.2090                 | 0.063           | -0.002          | 0.2090                 | 0.043           | -0.003          | 0.2090                 | 0.038           | -0.001          | 0.2090                  | -0.002          | -0.002          | 0.2090                 | 0.132           | -0.005          | 0.2090                 | 0.033           | 0.001           | 0.2090                 | 0.001           | -0.000          | 0.2090                 | 0.091           | -0.004          | 0.2090 | 0.001           | 0.001           |
| 0.2500                  | -0.014          | 0.003           | 0.2500                 | 0.025           | -0.006          | 0.2500                 | 0.011           | -0.001          | 0.2500                 | 0.010           | -0.004          | 0.2500                  | -0.001          | -0.001          | 0.2500                 | 0.097           | -0.000          | 0.2500                 | 0.031           | -0.004          | 0.2500                 | 0.001           | -0.001          | 0.2500                 | 0.082           | -0.002          | 0.2500 | 0.001           | 0.001           |
| 0.3000                  | -0.010          | 0.002           | 0.3000                 | 0.019           | -0.004          | 0.3000                 | 0.007           | -0.002          | 0.3000                 | 0.002           | -0.000          | 0.3000                  | -0.000          | -0.000          | 0.3000                 | 0.035           | -0.002          | 0.3000                 | 0.013           | 0.002           | 0.3000                 | 0.002           | 0.001           | 0.3000                 | 0.061           | 0.000           | 0.3000 | 0.001           | 0.001           |
| 0.3500                  | -0.007          | 0.003           | 0.3500                 | 0.014           | -0.005          | 0.3500                 | 0.007           | -0.001          | 0.3500                 | 0.012           | -0.002          | 0.3500                  | 0.002           | -0.000          | 0.3500                 | 0.012           | 0.001           | 0.3500                 | -0.000          | 0.001           | 0.3500                 | -0.001          | 0.001           | 0.3500                 | 0.067           | -0.001          | 0.3500 | 0.001           | 0.001           |
| 0.4000                  | -0.009          | 0.002           | 0.4000                 | 0.024           | -0.003          | 0.4000                 | 0.006           | -0.002          | 0.4000                 | 0.011           | -0.002          | 0.4000                  | 0.001           | -0.001          | 0.4000                 | 0.014           | 0.001           | 0.4000                 | 0.004           | -0.001          | 0.4000                 | 0.000           | -0.001          | 0.4000                 | 0.040           | -0.000          | 0.4000 | 0.001           | 0.001           |
| 0.4500                  | -0.020          | 0.001           | 0.4500                 | 0.056           | -0.002          | 0.4500                 | 0.016           | 0.000           | 0.4500                 | 0.015           | 0.001           | 0.4500                  | -0.001          | 0.002           | 0.4500                 | 0.026           | 0.001           | 0.4500                 | 0.008           | -0.000          | 0.4500                 | 0.003           | 0.001           | 0.4500                 | 0.040           | -0.000          | 0.4500 | 0.001           | 0.001           |
| 0.5000                  | -0.031          | -0.001          | 0.5000                 | 0.081           | -0.015          | 0.5000                 | 0.027           | -0.009          | 0.5000                 | 0.027           | -0.009          | 0.5000                  | 0.005           | 0.011           | 0.5000                 | 0.061           | 0.001           | 0.5000                 | 0.013           | 0.003           | 0.5000                 | 0.003           | -0.006          | 0.5000                 | 0.038           | -0.008          | 0.5000 | 0.001           | 0.001           |
| 0.5950                  | -0.041          | 0.002           | 0.5950                 | 0.103           | -0.002          | 0.5950                 | 0.048           | 0.001           | 0.5950                 | 0.038           | 0.001           | 0.5950                  | 0.005           | -0.001          | 0.5950                 | 0.118           | -0.003          | 0.5950                 | 0.022           | -0.000          | 0.5950                 | 0.006           | 0.000           | 0.5950                 | 0.055           | -0.001          | 0.5950 | 0.001           | 0.001           |
| 0.7050                  | -0.040          | 0.002           | 0.7050                 | 0.085           | -0.002          | 0.7050                 | 0.052           | -0.001          | 0.7050                 | 0.045           | -0.001          | 0.7050                  | 0.003           | 0.002           | 0.7050                 | 0.131           | -0.001          | 0.7050                 | 0.030           | -0.000          | 0.7050                 | 0.002           | -0.000          | 0.7050                 | 0.069           | -0.002          | 0.7050 | 0.001           | 0.001           |
| 0.8000                  | -0.026          | 0.001           | 0.8000                 | 0.061           | 0.000           | 0.8000                 | 0.040           | 0.002           | 0.8000                 | 0.035           | 0.002           | 0.8000                  | 0.001           | 0.001           | 0.8000                 | 0.134           | 0.000           | 0.8000                 | 0.031           | -0.002          | 0.8000                 | 0.005           | -0.000          | 0.8000                 | 0.079           | -0.003          | 0.8000 | 0.001           | 0.001           |
| 0.9000                  | -0.007          | -0.001          | 0.9000                 | 0.021           | -0.001          | 0.9000                 | 0.014           | -0.001          | 0.9000                 | 0.005           | -0.004          | 0.9000                  | -0.004          | -0.002          | 0.9000                 | 0.101           | -0.002          | 0.9000                 | 0.031           | 0.001           | 0.9000                 | 0.003           | 0.001           | 0.9000                 | 0.075           | -0.002          | 0.9000 | 0.001           | 0.001           |
| 0.9500                  | -0.003          | -0.000          | 0.9500                 | 0.010           | 0.001           | 0.9500                 | 0.004           | 0.001           | 0.9500                 | 0.002           | -0.002          | 0.9500                  | -0.001          | -0.001          | 0.9500                 | 0.034           | -0.001          | 0.9500                 | 0.020           | 0.001           | 0.9500                 | 0.000           | 0.000           | 0.9500                 | 0.059           | -0.000          | 0.9500 | 0.001           | 0.001           |
| 0.9900                  | -0.004          | -0.001          | 0.9900                 | 0.005           | -0.000          | 0.9900                 | 0.003           | -0.001          | 0.9900                 | 0.003           | -0.001          | 0.9900                  | 0.005           | -0.001          | 0.9900                 | 0.004           | -0.003          | 0.9900                 | 0.008           | -0.001          | 0.9900                 | 0.000           | -0.000          | 0.9900                 | 0.035           | -0.000          | 0.9900 | 0.001           | 0.001           |
| 1.0000                  | -0.004          | -0.001          | 1.0000                 | 0.005           | -0.001          | 1.0000                 | 0.003           | -0.001          | 1.0000                 | 0.003           | -0.001          | 1.0000                  | -0.010          | 0.001           | 1.0000                 | 0.007           | -0.002          | 1.0000                 | 0.000           | -0.004          | 1.0000                 | 0.005           | -0.001          | 1.0000                 | 0.027           | -0.000          | 1.0000 | 0.001           | 0.001           |
| M = 0.698<br>α = -00.15 |                 |                 | M = 0.700<br>α = 11.79 |                 |                 | M = 0.955<br>α = 03.78 |                 |                 | M = 1.102<br>α = 03.93 |                 |                 | M = 1.301<br>α = 03.69  |                 |                 | M = 1.299<br>α = 15.82 |                 |                 | M = 1.893<br>α = 04.03 |                 |                 | M = 2.231<br>α = 04.18 |                 |                 | M = 2.224<br>α = 16.22 |                 |                 |        |                 |                 |
| 0.0000                  | 0.008           | 0.001           | 0.0000                 | -0.055          | -0.016          | 0.0000                 | -0.011          | -0.032          | 0.0000                 | -0.015          | -0.021          | 0.0000                  | -0.012          | -0.012          | 0.0000                 | -0.001          | 0.052           | 0.0000                 | 0.024           | -0.025          | 0.0000                 | 0.019           | -0.037          | 0.0000                 | 0.097           | -0.030          | 0.0000 | 0.013           | -0.008          |
| 0.0500                  | 0.002           | 0.002           | 0.0500                 | 0.094           | -0.002          | 0.0500                 | 0.026           | -0.003          | 0.0500                 | 0.026           | -0.001          | 0.0500                  | 0.024           | 0.001           | 0.0500                 | 0.109           | -0.002          | 0.0500                 | 0.027           | -0.003          | 0.0500                 | 0.025           | -0.004          | 0.0500                 | 0.114           | -0.004          | 0.0500 | 0.001           | 0.001           |
| 0.1000                  | -0.001          | 0.000           | 0.1000                 | 0.167           | -0.004          | 0.1000                 | 0.046           | 0.002           | 0.1000                 | 0.044           | 0.001           | 0.1000                  | 0.032           | 0.002           | 0.1000                 | 0.175           | -0.010          | 0.1000                 | 0.031           | -0.004          | 0.1000                 | 0.029           | -0.006          | 0.1000                 | 0.123           | -0.003          | 0.1000 | 0.001           | 0.001           |
| 0.1353                  | -0.001          | -0.002          | 0.1353                 | 0.172           | -0.015          | 0.1353                 | 0.049           | -0.009          | 0.1353                 | 0.044           | -0.008          | 0.1353                  | 0.024           | -0.004          | 0.1353                 | 0.195           | 0.011           | 0.1353                 | 0.034           | -0.001          | 0.1353                 | 0.031           | -0.002          | 0.1353                 | 0.125           | -0.003          | 0.1353 | 0.001           | 0.001           |
| 0.2090                  | 0.002           | 0.000           | 0.2090                 | 0.093           | -0.004          | 0.2090                 | 0.038           | -0.003          | 0.2090                 | 0.041           | -0.002          | 0.2090                  | -0.002          | -0.002          | 0.2090                 | 0.183           | -0.005          | 0.2090                 | 0.032           | -0.002          | 0.2090                 | 0.029           | -0.000          | 0.2090                 | 0.125           | -0.004          | 0.2090 | 0.001           | 0.001           |
| 0.2500                  | 0.000           | 0.000           | 0.2500                 | 0.042           | 0.000           | 0.2500                 | 0.019           | 0.003           | 0.2500                 | 0.021           | -0.002          | 0.2500                  | 0.029           | 0.002           | 0.2500                 | 0.131           | -0.000          | 0.2500                 | 0.028           | -0.001          | 0.2500                 | 0.024           | -0.001          | 0.2500                 | 0.114           | -0.003          | 0.2500 | 0.001           | 0.001           |
| 0.3000                  | 0.000           | 0.000           | 0.3000                 | 0.034           | -0.004          | 0.3000                 | 0.003           | -0.001          | 0.3000                 | 0.007           | -0.000          | 0.3000                  | 0.010           | 0.000           | 0.3000                 | 0.053           | -0.002          | 0.3000                 | 0.018           | 0.001           | 0.3000                 | 0.021           | -0.001          | 0.3000                 | 0.083           | -0.000          | 0.3000 | 0.001           | 0.001           |
| 0.3500                  | 0.001           | -0.001          | 0.3500                 | 0.033           | -0.002          | 0.3500                 | 0.006           | -0.001          | 0.3500                 | 0.004           | -0.001          | 0.3500                  | 0.010           | 0.000           | 0.3500                 | 0.053           | -0.002          | 0.3500                 | 0.018           | 0.001           | 0.3500                 | 0.013           | -0.002          | 0.3500                 | 0.070           | -0.001          | 0.3500 | 0.001           | 0.001           |
| 0.4000                  | 0.000           | 0.000           | 0.4000                 | 0.043           | -0.003          | 0.4000                 | 0.004           | -0.001          | 0.4000                 | 0.003           | -0.003          | 0.4000                  | 0.003           | -0.002          | 0.4000                 | 0.014           | 0.002           | 0.4000                 | 0.006           | -0.000          | 0.4000                 | 0.008           | -0.002          | 0.4000                 | 0.061           | -0.001          | 0.4000 | 0.001           | 0.001           |
| 0.4500                  | 0.002           | 0.001           | 0.4500                 | 0.094           | -0.003          | 0.4500                 | 0.015           | 0.001           | 0.4500                 | 0.011           | 0.001           | 0.4500                  | 0.016           | 0.006           | 0.4500                 | 0.040           | -0.003          | 0.4500                 | 0.008           | 0.001           | 0.4500                 | 0.008           | 0.000           | 0.4500                 | 0.056           | -0.001          | 0.4500 | 0.001           | 0.001           |
| 0.5000                  | 0.001           | -0.005          | 0.5000                 | 0.135           | -0.022          | 0.5000                 | 0.026           | -0.007          | 0.5000                 | 0.031           | -0.007          | 0.5000                  | 0.016           | 0.009           | 0.5000                 | 0.087           | -0.002          | 0.5000                 | 0.014           | 0.002           | 0.5000                 | 0.008           | -0.010          | 0.5000                 | 0.063           | -0.009          | 0.5000 | 0.001           | 0.001           |
| 0.5950                  | 0.002           | 0.000           | 0.5950                 | 0.167           | -0.003          | 0.5950                 | 0.047           | 0.000           | 0.5950                 | 0.048           | -0.001          | 0.5950                  | 0.029           | -0.002          | 0.5950                 | 0.169           | -0.005          | 0.5950                 | 0.021           | -0.001          | 0.5950                 | 0.019           | 0.000           | 0.5950                 | 0.076           | -0.003          | 0.5950 | 0.001           | 0.001           |
| 0.7050                  | -0.001          | 0.000           | 0.7050                 | 0.136           | -0.002          | 0.7050                 | 0.053           | -0.002          | 0.7050                 | 0.048           | -0.003          | 0.7050                  | 0.033           | 0.000           | 0.7050                 | 0.182           | -0.004          | 0.7050                 | 0.026           | -0.000          | 0.7050                 | 0.021           | -0.000          | 0.7050                 | 0.095           | -0.003          | 0.7050 | 0.001           | 0.001           |
| 0.8000                  | 0.003           | 0.001           | 0.8000                 | 0.081           | 0.000           | 0.8000                 | 0.049           | 0.003           | 0.8000                 | 0.040           | 0.002           | 0.8000                  | 0.039           | 0.001           | 0.8000                 | 0.182           | -0.003          | 0.8000                 | 0.029           | -0.001          | 0.8000                 | 0.026           | -0.001          | 0.8000                 | 0.109           | -0.002          | 0.8000 | 0.001           | 0.001           |
| 0.9000                  | 0.003           | -0.001          | 0.9000                 | 0.030           | -0.000          | 0.9000                 | 0.029           | -0.004          | 0.9000                 | 0.017           | -0.004          | 0.9000                  | 0.033           | -0.003          | 0.9000                 | 0.140           | -0.004          | 0.9000                 | 0.029           | -0.000          | 0.9000                 | 0               |                 |                        |                 |                 |        |                 |                 |



TABLE VIII.- SECTION COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Continued  
(c) BVWC;  $\delta = 10.2^\circ$

| $x/l$                       | $C_{NB}$ | $C_{YB}$ | $x/l$                      | $C_{NB}$ | $C_{YB}$ | $x/l$                      | $C_{NB}$ | $C_{YB}$ | $x/l$                      | $C_{NB}$ | $C_{YB}$ | $x/l$                       | $C_{NB}$ | $C_{YB}$ | $x/l$                      | $C_{NB}$ | $C_{YB}$ | $x/l$                      | $C_{NB}$ | $C_{YB}$ | $x/l$                      | $C_{NB}$ | $C_{YB}$ | $x/l$                      | $C_{NB}$ | $C_{YB}$ |
|-----------------------------|----------|----------|----------------------------|----------|----------|----------------------------|----------|----------|----------------------------|----------|----------|-----------------------------|----------|----------|----------------------------|----------|----------|----------------------------|----------|----------|----------------------------|----------|----------|----------------------------|----------|----------|
| $M = 0.697$<br>$Q = -04.42$ |          |          | $M = 0.699$<br>$Q = 07.71$ |          |          | $M = 0.903$<br>$Q = 03.78$ |          |          | $M = 1.050$<br>$Q = 03.93$ |          |          | $M = 1.303$<br>$Q = -00.10$ |          |          | $M = 1.300$<br>$Q = 11.89$ |          |          | $M = 1.703$<br>$Q = 03.73$ |          |          | $M = 2.230$<br>$Q = 00.20$ |          |          | $M = 2.232$<br>$Q = 12.24$ |          |          |
| 0.0000                      | -0.045   | -0.020   | 0.0000                     | -0.046   | -0.100   | 0.0000                     | -0.036   | -0.050   | 0.0000                     | -0.020   | -0.048   | 0.0000                      | 0.013    | -0.032   | 0.0000                     | 0.199    | -0.062   | 0.0000                     | 0.117    | -0.060   | 0.0000                     | 0.054    | -0.054   | 0.0000                     | 0.215    | -0.073   |
| 0.0500                      | -0.024   | 0.002    | 0.0500                     | 0.062    | -0.004   | 0.0500                     | 0.029    | -0.002   | 0.0500                     | 0.025    | -0.002   | 0.0500                      | 0.000    | 0.003    | 0.0500                     | 0.077    | -0.002   | 0.0500                     | 0.026    | -0.003   | 0.0500                     | 0.002    | -0.001   | 0.0500                     | 0.082    | -0.002   |
| 0.1000                      | -0.008   | 0.005    | 0.1000                     | 0.155    | 0.011    | 0.1000                     | 0.086    | 0.008    | 0.1000                     | 0.075    | 0.009    | 0.1000                      | 0.017    | 0.009    | 0.1000                     | 0.108    | 0.008    | 0.1000                     | 0.024    | 0.012    | 0.1000                     | 0.002    | 0.013    | 0.1000                     | 0.058    | 0.017    |
| 0.1353                      | 0.001    | -0.003   | 0.1353                     | 0.210    | -0.028   | 0.1353                     | 0.121    | -0.008   | 0.1353                     | 0.114    | -0.005   | 0.1353                      | 0.048    | -0.004   | 0.1353                     | 0.221    | -0.014   | 0.1353                     | 0.075    | -0.001   | 0.1353                     | 0.023    | -0.001   | 0.1353                     | 0.106    | 0.000    |
| 0.2090                      | -0.017   | 0.000    | 0.2090                     | 0.059    | -0.010   | 0.2090                     | 0.059    | -0.005   | 0.2090                     | 0.050    | -0.005   | 0.2090                      | 0.037    | -0.003   | 0.2090                     | 0.163    | -0.012   | 0.2090                     | 0.065    | -0.003   | 0.2090                     | 0.018    | -0.006   | 0.2090                     | 0.117    | -0.009   |
| 0.2500                      | -0.006   | -0.000   | 0.2500                     | 0.021    | -0.001   | 0.2500                     | 0.005    | -0.002   | 0.2500                     | 0.070    | -0.000   | 0.2500                      | 0.010    | -0.004   | 0.2500                     | 0.101    | -0.006   | 0.2500                     | 0.045    | -0.001   | 0.2500                     | 0.018    | -0.000   | 0.2500                     | 0.090    | 0.000    |
| 0.3000                      | -0.013   | 0.000    | 0.3000                     | 0.006    | 0.000    | 0.3000                     | -0.007   | 0.002    | 0.3000                     | -0.015   | 0.001    | 0.3000                      | 0.007    | 0.003    | 0.3000                     | 0.007    | 0.000    | 0.3000                     | 0.026    | 0.002    | 0.3000                     | 0.012    | 0.003    | 0.3000                     | 0.060    | 0.001    |
| 0.3500                      | -0.013   | 0.001    | 0.3500                     | 0.008    | -0.002   | 0.3500                     | -0.004   | 0.000    | 0.3500                     | -0.005   | 0.001    | 0.3500                      | -0.010   | 0.002    | 0.3500                     | -0.007   | -0.000   | 0.3500                     | 0.002    | -0.001   | 0.3500                     | 0.008    | 0.001    | 0.3500                     | 0.036    | -0.003   |
| 0.4000                      | -0.018   | -0.000   | 0.4000                     | 0.017    | -0.004   | 0.4000                     | -0.002   | 0.001    | 0.4000                     | 0.007    | -0.002   | 0.4000                      | -0.010   | 0.002    | 0.4000                     | -0.002   | 0.000    | 0.4000                     | -0.006   | 0.001    | 0.4000                     | -0.002   | -0.000   | 0.4000                     | 0.026    | -0.000   |
| 0.4500                      | -0.043   | 0.003    | 0.4500                     | 0.028    | 0.002    | 0.4500                     | -0.029   | 0.005    | 0.4500                     | -0.012   | 0.005    | 0.4500                      | -0.014   | 0.005    | 0.4500                     | 0.026    | 0.003    | 0.4500                     | -0.012   | 0.002    | 0.4500                     | -0.002   | 0.000    | 0.4500                     | 0.019    | 0.001    |
| 0.5000                      | -0.051   | 0.004    | 0.5000                     | 0.055    | -0.011   | 0.5000                     | -0.046   | 0.005    | 0.5000                     | -0.042   | 0.006    | 0.5000                      | -0.027   | 0.017    | 0.5000                     | 0.055    | 0.001    | 0.5000                     | -0.010   | 0.008    | 0.5000                     | -0.007   | -0.002   | 0.5000                     | 0.021    | -0.011   |
| 0.5950                      | -0.048   | 0.003    | 0.5950                     | 0.094    | -0.003   | 0.5950                     | 0.036    | 0.002    | 0.5950                     | 0.010    | 0.002    | 0.5950                      | -0.022   | -0.000   | 0.5950                     | 0.108    | -0.003   | 0.5950                     | -0.016   | -0.001   | 0.5950                     | -0.013   | 0.001    | 0.5950                     | 0.056    | -0.001   |
| 0.7050                      | -0.043   | 0.002    | 0.7050                     | 0.075    | -0.002   | 0.7050                     | 0.053    | -0.001   | 0.7050                     | 0.045    | -0.001   | 0.7050                      | -0.006   | 0.002    | 0.7050                     | 0.131    | -0.000   | 0.7050                     | 0.020    | -0.001   | 0.7050                     | -0.008   | 0.000    | 0.7050                     | 0.069    | -0.002   |
| 0.8000                      | -0.025   | 0.001    | 0.8000                     | 0.044    | 0.001    | 0.8000                     | 0.042    | 0.001    | 0.8000                     | 0.048    | -0.001   | 0.8000                      | 0.003    | 0.001    | 0.8000                     | 0.139    | -0.001   | 0.8000                     | 0.030    | -0.002   | 0.8000                     | 0.001    | -0.000   | 0.8000                     | 0.077    | -0.002   |
| 0.9000                      | -0.007   | -0.001   | 0.9000                     | 0.017    | -0.000   | 0.9000                     | 0.013    | -0.001   | 0.9000                     | 0.057    | -0.005   | 0.9000                      | 0.002    | -0.002   | 0.9000                     | 0.100    | -0.002   | 0.9000                     | 0.031    | 0.002    | 0.9000                     | 0.002    | 0.000    | 0.9000                     | 0.072    | -0.001   |
| 0.9500                      | -0.003   | -0.000   | 0.9500                     | 0.010    | -0.000   | 0.9500                     | 0.002    | -0.000   | 0.9500                     | 0.019    | 0.000    | 0.9500                      | 0.002    | -0.001   | 0.9500                     | 0.039    | -0.004   | 0.9500                     | 0.018    | 0.001    | 0.9500                     | 0.003    | 0.000    | 0.9500                     | 0.057    | -0.001   |
| 0.9900                      | -0.004   | -0.000   | 0.9900                     | 0.007    | 0.000    | 0.9900                     | 0.003    | -0.000   | 0.9900                     | -0.006   | 0.000    | 0.9900                      | 0.006    | -0.002   | 0.9900                     | 0.093    | -0.004   | 0.9900                     | 0.006    | 0.000    | 0.9900                     | 0.001    | -0.000   | 0.9900                     | 0.034    | -0.001   |
| 1.0000                      | -0.005   | -0.000   | 1.0000                     | 0.007    | -0.000   | 1.0000                     | 0.003    | -0.000   | 1.0000                     | -0.012   | -0.001   | 1.0000                      | 0.007    | -0.003   | 1.0000                     | -0.004   | -0.003   | 1.0000                     | 0.003    | 0.000    | 1.0000                     | 0.000    | -0.000   | 1.0000                     | 0.026    | -0.001   |
| $M = 0.696$<br>$Q = -00.06$ |          |          | $M = 0.700$<br>$Q = 11.74$ |          |          | $M = 0.951$<br>$Q = 03.82$ |          |          | $M = 1.099$<br>$Q = 03.93$ |          |          | $M = 1.304$<br>$Q = 03.78$  |          |          | $M = 1.299$<br>$Q = 15.72$ |          |          | $M = 1.909$<br>$Q = 03.93$ |          |          | $M = 2.231$<br>$Q = 04.18$ |          |          | $M = 2.232$<br>$Q = 16.26$ |          |          |
| 0.0000                      | -0.033   | -0.034   | 0.0000                     | -0.315   | -0.133   | 0.0000                     | -0.023   | -0.047   | 0.0000                     | 0.000    | -0.042   | 0.0000                      | 0.110    | -0.064   | 0.0000                     | 0.223    | -0.107   | 0.0000                     | 0.127    | -0.060   | 0.0000                     | 0.120    | -0.077   | 0.0000                     | 0.281    | -0.098   |
| 0.0500                      | 0.008    | 0.001    | 0.0500                     | 0.095    | -0.002   | 0.0500                     | 0.028    | -0.001   | 0.0500                     | 0.026    | -0.001   | 0.0500                      | 0.023    | 0.000    | 0.0500                     | 0.107    | -0.003   | 0.0500                     | 0.028    | -0.003   | 0.0500                     | 0.026    | -0.003   | 0.0500                     | 0.114    | -0.003   |
| 0.1000                      | 0.041    | 0.008    | 0.1000                     | 0.279    | 0.022    | 0.1000                     | 0.083    | 0.007    | 0.1000                     | 0.075    | 0.008    | 0.1000                      | 0.036    | 0.014    | 0.1000                     | 0.146    | 0.018    | 0.1000                     | 0.017    | 0.013    | 0.1000                     | 0.014    | 0.016    | 0.1000                     | 0.081    | 0.022    |
| 0.1353                      | 0.059    | -0.003   | 0.1353                     | 0.272    | -0.027   | 0.1353                     | 0.125    | -0.007   | 0.1353                     | 0.123    | -0.008   | 0.1353                      | 0.036    | -0.008   | 0.1353                     | 0.266    | -0.017   | 0.1353                     | 0.063    | -0.000   | 0.1353                     | 0.055    | -0.004   | 0.1353                     | 0.138    | -0.001   |
| 0.2090                      | 0.008    | -0.001   | 0.2090                     | 0.089    | -0.013   | 0.2090                     | 0.057    | -0.005   | 0.2090                     | 0.068    | -0.005   | 0.2090                      | 0.077    | -0.006   | 0.2090                     | 0.193    | -0.015   | 0.2090                     | 0.059    | -0.005   | 0.2090                     | 0.050    | -0.003   | 0.2090                     | 0.158    | -0.012   |
| 0.2500                      | 0.004    | 0.000    | 0.2500                     | 0.028    | -0.005   | 0.2500                     | 0.073    | 0.001    | 0.2500                     | 0.037    | -0.003   | 0.2500                      | 0.041    | -0.001   | 0.2500                     | 0.129    | -0.007   | 0.2500                     | 0.043    | -0.001   | 0.2500                     | 0.042    | -0.000   | 0.2500                     | 0.119    | -0.001   |
| 0.3000                      | -0.006   | 0.001    | 0.3000                     | 0.015    | -0.003   | 0.3000                     | -0.025   | -0.000   | 0.3000                     | -0.018   | 0.000    | 0.3000                      | 0.006    | 0.001    | 0.3000                     | 0.001    | -0.002   | 0.3000                     | 0.030    | -0.001   | 0.3000                     | 0.031    | -0.001   | 0.3000                     | 0.082    | -0.000   |
| 0.3500                      | -0.006   | 0.001    | 0.3500                     | 0.023    | 0.003    | 0.3500                     | -0.005   | 0.004    | 0.3500                     | -0.017   | 0.003    | 0.3500                      | -0.016   | 0.005    | 0.3500                     | 0.003    | 0.006    | 0.3500                     | 0.007    | -0.001   | 0.3500                     | 0.017    | -0.001   | 0.3500                     | 0.057    | -0.001   |
| 0.4000                      | -0.009   | 0.000    | 0.4000                     | 0.030    | -0.001   | 0.4000                     | -0.001   | 0.001    | 0.4000                     | 0.000    | 0.001    | 0.4000                      | -0.006   | -0.000   | 0.4000                     | 0.022    | -0.004   | 0.4000                     | -0.004   | 0.001    | 0.4000                     | 0.005    | -0.001   | 0.4000                     | 0.047    | 0.000    |
| 0.4500                      | -0.027   | 0.004    | 0.4500                     | 0.073    | -0.001   | 0.4500                     | -0.026   | 0.004    | 0.4500                     | -0.032   | 0.005    | 0.4500                      | -0.008   | 0.005    | 0.4500                     | 0.056    | -0.001   | 0.4500                     | -0.003   | 0.002    | 0.4500                     | 0.002    | 0.000    | 0.4500                     | 0.044    | -0.000   |
| 0.5000                      | -0.026   | 0.001    | 0.5000                     | 0.115    | -0.019   | 0.5000                     | -0.050   | 0.006    | 0.5000                     | -0.048   | 0.018    | 0.5000                      | -0.022   | 0.015    | 0.5000                     | 0.089    | -0.003   | 0.5000                     | -0.003   | 0.006    | 0.5000                     | -0.001   | -0.006   | 0.5000                     | 0.048    | -0.013   |
| 0.5950                      | -0.005   | 0.000    | 0.5950                     | 0.163    | -0.003   | 0.5950                     | 0.034    | 0.004    | 0.5950                     | 0.022    | -0.000   | 0.5950                      | -0.017   | -0.001   | 0.5950                     | 0.169    | -0.002   | 0.5950                     | -0.007   | -0.001   | 0.5950                     | 0.001    | 0.000    | 0.5950                     | 0.071    | -0.002   |
| 0.7050                      | -0.001   | 0.000    | 0.7050                     | 0.137    | -0.003   | 0.7050                     | 0.060    | -0.003   | 0.7050                     | 0.052    | -0.002   | 0.7050                      | 0.034    | 0.001    | 0.7050                     | 0.178    | -0.004   | 0.7050                     | 0.013    | -0.001   | 0.7050                     | 0.011    | -0.001   | 0.7050                     | 0.094    | -0.003   |
| 0.8000                      | 0.006    | 0.001    | 0.8000                     | 0.086    | 0.000    | 0.8000                     | 0.051    | 0.003    | 0.8000                     | 0.044    | 0.002    | 0.8000                      | 0.043    | -0.000   | 0.8000                     | 0.190    | -0.003   | 0.8000                     | 0.028    | -0.001   | 0.8000                     | 0.023    | -0.001   | 0.8000                     | 0.108    | -0.002   |
| 0.9000                      | 0.005    | -0.001   | 0.9000                     | 0.033    | 0.000    | 0.9000                     | 0.042    | -0.003   | 0.9000                     | 0.037    | -0.006   | 0.9000                      | 0.036    | -0.002   | 0.9000                     | 0.125    | -0.005   | 0.9000                     | 0.028    | -0.001   | 0.9000                     | 0.024    | -0.000   | 0.9000                     | 0.100    | -0.002   |
| 0.9500                      | 0.003    | -0.000   | 0.9500                     | 0.018    | 0.001    | 0.9500                     | -0.005   | 0.000    | 0.9500                     | 0.017    | -0.000   | 0.9500                      | 0.000    | -0.002   | 0.9500                     | 0.046    | -0.003   | 0.9500                     | 0.015    | 0.001    | 0.9500                     | 0.021    | 0.000    | 0.9500                     | 0.079    | -0.002   |
| 0.9900                      | 0.001    | -0.001   | 0.9900                     | 0.011    | -0.000   | 0.9900                     | 0.002    | -0.000   | 0.9900                     | 0.004    | 0.000    | 0.9900                      | -0.007   | -0.000   | 0.9900                     | 0.006    | -0.001   | 0.9900                     | 0.006    | 0.000    | 0.9900                     | 0.011    | -0.001   | 0.9900                     | 0.046    | -0.000   |
| 1.0000                      | 0.000    | -0.002   | 1.0000                     | 0.010    | -0.001   | 1.0000                     | 0.010    | -0.001   | 1.0000                     | 0.009    | -0.001   | 1.0000                      | -0.016   | -0.000   | 1.0000                     | -0.000   | -0.000   | 1.0000                     | 0.004    | 0.000    | 1.0000                     | 0.007    | -0.001   | 1.0000                     | 0.036    | -0.000   |
| $M = 0.701$<br>$Q = 03.68$  |          |          | $M = 0.699$<br>$Q = 15.76$ |          |          | $M = 1.004$<br>$Q$         |          |          |                            |          |          |                             |          |          |                            |          |          |                            |          |          |                            |          |          |                            |          |          |



TABLE VIII.- SECTION COEFFICIENTS FOR THE BODY WITH THE MODEL AT 0° SIDESLIP - Concluded  
(d) BW

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| x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                   | C <sub>NB</sub> | C <sub>YB</sub> | x/l                   | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l                    | C <sub>NB</sub> | C <sub>YB</sub> | x/l    | C <sub>NB</sub> | C <sub>YB</sub> |
|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|--------|-----------------|-----------------|
| M = 0.698<br>α = -0.42 |                 |                 | M = 0.700<br>α = 0.76  |                 |                 | M = 0.903<br>α = 0.38 |                 |                 | M = 1.002<br>α = 0.88 |                 |                 | M = 1.299<br>α = -0.18 |                 |                 | M = 1.401<br>α = 0.81  |                 |                 | M = 1.500<br>α = 0.38  |                 |                 | M = 2.229<br>α = -0.88 |                 |                 | M = 2.234<br>α = 0.26  |                 |                 |        |                 |                 |
| 0.0000                 | -0.025          | 0.008           | 0.0000                 | 0.073           | -0.022          | 0.0000                | 0.041           | -0.016          | 0.0000                | 0.043           | -0.007          | 0.0000                 | -0.022          | -0.005          | 0.0000                 | 0.066           | -0.012          | 0.0000                 | 0.038           | -0.015          | 0.0000                 | -0.044          | -0.033          | 0.0000                 | 0.060           | -0.048          | 0.0000 | 0.054           | -0.008          |
| 0.0500                 | -0.022          | 0.006           | 0.0500                 | 0.055           | -0.005          | 0.0500                | 0.028           | -0.002          | 0.0500                | 0.027           | -0.001          | 0.0500                 | -0.023          | 0.002           | 0.0500                 | 0.050           | 0.000           | 0.0500                 | 0.025           | -0.003          | 0.0500                 | -0.023          | 0.000           | 0.0500                 | 0.054           | -0.008          | 0.0500 | 0.054           | -0.008          |
| 0.1000                 | -0.019          | 0.003           | 0.1000                 | 0.043           | -0.001          | 0.1000                | 0.021           | 0.001           | 0.1000                | 0.019           | -0.002          | 0.1000                 | -0.021          | 0.002           | 0.1000                 | 0.041           | 0.002           | 0.1000                 | 0.018           | -0.001          | 0.1000                 | -0.014          | 0.000           | 0.1000                 | 0.045           | -0.004          | 0.1000 | 0.045           | -0.004          |
| 0.1353                 | -0.017          | 0.001           | 0.1353                 | 0.038           | -0.005          | 0.1353                | 0.020           | -0.003          | 0.1353                | 0.019           | -0.002          | 0.1353                 | -0.017          | -0.000          | 0.1353                 | 0.039           | -0.003          | 0.1353                 | 0.017           | -0.005          | 0.1353                 | -0.015          | -0.000          | 0.1353                 | 0.053           | -0.005          | 0.1353 | 0.053           | -0.005          |
| 0.2090                 | -0.013          | 0.003           | 0.2090                 | 0.031           | -0.002          | 0.2090                | 0.016           | 0.000           | 0.2090                | 0.015           | 0.000           | 0.2090                 | -0.013          | 0.000           | 0.2090                 | 0.028           | -0.000          | 0.2090                 | 0.012           | -0.002          | 0.2090                 | -0.012          | -0.001          | 0.2090                 | 0.029           | -0.002          | 0.2090 | 0.029           | -0.002          |
| 0.2500                 | -0.012          | 0.002           | 0.2500                 | 0.027           | -0.001          | 0.2500                | 0.013           | -0.002          | 0.2500                | 0.013           | -0.002          | 0.2500                 | -0.013          | 0.001           | 0.2500                 | 0.028           | -0.001          | 0.2500                 | 0.009           | -0.002          | 0.2500                 | -0.012          | -0.000          | 0.2500                 | 0.026           | -0.002          | 0.2500 | 0.026           | -0.002          |
| 0.3000                 | -0.011          | 0.001           | 0.3000                 | 0.025           | -0.001          | 0.3000                | 0.011           | 0.000           | 0.3000                | 0.011           | -0.000          | 0.3000                 | -0.011          | -0.000          | 0.3000                 | 0.022           | -0.001          | 0.3000                 | 0.011           | 0.000           | 0.3000                 | -0.011          | 0.001           | 0.3000                 | 0.025           | -0.002          | 0.3000 | 0.025           | -0.002          |
| 0.3500                 | -0.011          | 0.002           | 0.3500                 | 0.024           | -0.000          | 0.3500                | 0.009           | -0.001          | 0.3500                | 0.010           | -0.001          | 0.3500                 | -0.010          | -0.000          | 0.3500                 | 0.018           | -0.001          | 0.3500                 | 0.011           | -0.002          | 0.3500                 | -0.010          | -0.000          | 0.3500                 | 0.022           | -0.001          | 0.3500 | 0.022           | -0.001          |
| 0.4000                 | -0.012          | 0.005           | 0.4000                 | 0.033           | -0.002          | 0.4000                | 0.011           | -0.001          | 0.4000                | 0.008           | -0.002          | 0.4000                 | -0.008          | -0.002          | 0.4000                 | 0.017           | -0.002          | 0.4000                 | 0.008           | -0.001          | 0.4000                 | -0.008          | -0.001          | 0.4000                 | 0.021           | -0.003          | 0.4000 | 0.021           | -0.003          |
| 0.4500                 | -0.014          | 0.002           | 0.4500                 | 0.082           | -0.005          | 0.4500                | 0.037           | -0.002          | 0.4500                | 0.028           | -0.001          | 0.4500                 | -0.011          | 0.005           | 0.4500                 | 0.027           | -0.000          | 0.4500                 | 0.014           | 0.002           | 0.4500                 | -0.005          | 0.002           | 0.4500                 | 0.020           | -0.001          | 0.4500 | 0.020           | -0.001          |
| 0.5000                 | -0.043          | 0.001           | 0.5000                 | 0.107           | -0.006          | 0.5000                | 0.050           | -0.003          | 0.5000                | 0.050           | -0.001          | 0.5000                 | -0.025          | 0.001           | 0.5000                 | 0.087           | -0.005          | 0.5000                 | 0.023           | -0.001          | 0.5000                 | -0.007          | 0.000           | 0.5000                 | 0.030           | -0.004          | 0.5000 | 0.030           | -0.004          |
| 0.5950                 | -0.044          | 0.002           | 0.5950                 | 0.108           | -0.002          | 0.5950                | 0.055           | -0.000          | 0.5950                | 0.050           | -0.001          | 0.5950                 | -0.036          | -0.000          | 0.5950                 | 0.084           | -0.003          | 0.5950                 | 0.032           | -0.002          | 0.5950                 | -0.018          | 0.001           | 0.5950                 | 0.046           | -0.000          | 0.5950 | 0.046           | -0.000          |
| 0.7050                 | -0.039          | 0.001           | 0.7050                 | 0.087           | -0.001          | 0.7050                | 0.056           | -0.001          | 0.7050                | 0.050           | -0.001          | 0.7050                 | -0.041          | 0.004           | 0.7050                 | 0.083           | -0.001          | 0.7050                 | 0.036           | 0.000           | 0.7050                 | -0.019          | 0.001           | 0.7050                 | 0.050           | -0.002          | 0.7050 | 0.050           | -0.002          |
| 0.8000                 | -0.022          | 0.001           | 0.8000                 | 0.058           | -0.000          | 0.8000                | 0.044           | 0.001           | 0.8000                | 0.058           | 0.002           | 0.8000                 | -0.037          | 0.003           | 0.8000                 | 0.085           | -0.000          | 0.8000                 | 0.037           | 0.001           | 0.8000                 | -0.018          | 0.001           | 0.8000                 | 0.053           | -0.004          | 0.8000 | 0.053           | -0.004          |
| 0.9000                 | -0.006          | -0.001          | 0.9000                 | 0.015           | 0.000           | 0.9000                | 0.005           | -0.001          | 0.9000                | 0.050           | -0.005          | 0.9000                 | -0.031          | -0.001          | 0.9000                 | 0.080           | -0.003          | 0.9000                 | 0.037           | 0.000           | 0.9000                 | -0.017          | 0.001           | 0.9000                 | 0.050           | -0.003          | 0.9000 | 0.050           | -0.003          |
| 0.9500                 | -0.003          | 0.000           | 0.9500                 | 0.005           | 0.000           | 0.9500                | -0.001          | 0.001           | 0.9500                | -0.010          | 0.001           | 0.9500                 | -0.013          | -0.000          | 0.9500                 | 0.041           | 0.000           | 0.9500                 | 0.022           | 0.002           | 0.9500                 | -0.012          | 0.002           | 0.9500                 | 0.039           | -0.001          | 0.9500 | 0.039           | -0.001          |
| 0.9900                 | -0.004          | -0.000          | 0.9900                 | 0.004           | -0.000          | 0.9900                | -0.001          | 0.000           | 0.9900                | -0.004          | 0.000           | 0.9900                 | -0.010          | -0.001          | 0.9900                 | -0.013          | -0.002          | 0.9900                 | 0.000           | -0.001          | 0.9900                 | -0.006          | 0.003           | 0.9900                 | 0.024           | -0.002          | 0.9900 | 0.024           | -0.002          |
| 1.0000                 | -0.005          | -0.001          | 1.0000                 | 0.005           | -0.001          | 1.0000                | 0.003           | -0.000          | 1.0000                | 0.005           | -0.001          | 1.0000                 | -0.018          | -0.002          | 1.0000                 | -0.029          | -0.003          | 1.0000                 | -0.006          | -0.002          | 1.0000                 | -0.004          | 0.003           | 1.0000                 | 0.019           | -0.002          | 1.0000 | 0.019           | -0.002          |
| M = 0.700<br>α = -0.06 |                 |                 | M = 0.696<br>α = 11.79 |                 |                 | M = 0.957<br>α = 0.88 |                 |                 | M = 1.062<br>α = 0.93 |                 |                 | M = 1.304<br>α = -0.10 |                 |                 | M = 1.301<br>α = 11.84 |                 |                 | M = 1.703<br>α = 0.373 |                 |                 | M = 2.226<br>α = 0.025 |                 |                 | M = 2.232<br>α = 12.24 |                 |                 |        |                 |                 |
| 0.0000                 | 0.008           | -0.005          | 0.0000                 | 0.134           | -0.005          | 0.0000                | 0.038           | -0.005          | 0.0000                | 0.032           | -0.015          | 0.0000                 | -0.013          | -0.003          | 0.0000                 | 0.095           | -0.018          | 0.0000                 | 0.031           | -0.021          | 0.0000                 | 0.000           | -0.032          | 0.0000                 | 0.090           | -0.033          | 0.0000 | 0.084           | -0.002          |
| 0.0500                 | 0.008           | 0.000           | 0.0500                 | 0.081           | -0.004          | 0.0500                | 0.027           | -0.002          | 0.0500                | 0.025           | -0.001          | 0.0500                 | -0.011          | 0.002           | 0.0500                 | 0.076           | -0.002          | 0.0500                 | 0.029           | -0.003          | 0.0500                 | 0.002           | -0.001          | 0.0500                 | 0.084           | -0.002          | 0.0500 | 0.084           | -0.002          |
| 0.1000                 | 0.002           | 0.001           | 0.1000                 | 0.057           | -0.007          | 0.1000                | 0.021           | -0.002          | 0.1000                | 0.020           | -0.001          | 0.1000                 | -0.011          | 0.002           | 0.1000                 | 0.059           | -0.002          | 0.1000                 | 0.016           | 0.000           | 0.1000                 | 0.003           | 0.007           | 0.1000                 | 0.072           | -0.005          | 0.1000 | 0.072           | -0.005          |
| 0.1353                 | 0.003           | -0.001          | 0.1353                 | 0.055           | -0.005          | 0.1353                | 0.020           | -0.004          | 0.1353                | 0.020           | -0.001          | 0.1353                 | -0.011          | -0.001          | 0.1353                 | 0.059           | -0.002          | 0.1353                 | 0.016           | 0.000           | 0.1353                 | 0.002           | -0.002          | 0.1353                 | 0.074           | -0.004          | 0.1353 | 0.074           | -0.004          |
| 0.2090                 | 0.001           | 0.000           | 0.2090                 | 0.048           | -0.009          | 0.2090                | 0.016           | -0.000          | 0.2090                | 0.014           | 0.000           | 0.2090                 | -0.011          | -0.001          | 0.2090                 | 0.044           | -0.002          | 0.2090                 | 0.011           | -0.001          | 0.2090                 | 0.001           | -0.000          | 0.2090                 | 0.049           | -0.002          | 0.2090 | 0.049           | -0.002          |
| 0.2500                 | 0.001           | 0.000           | 0.2500                 | 0.042           | -0.004          | 0.2500                | 0.013           | -0.002          | 0.2500                | 0.010           | -0.002          | 0.2500                 | -0.010          | -0.000          | 0.2500                 | 0.040           | -0.002          | 0.2500                 | 0.013           | -0.002          | 0.2500                 | 0.001           | -0.001          | 0.2500                 | 0.039           | -0.005          | 0.2500 | 0.039           | -0.005          |
| 0.3000                 | 0.001           | 0.000           | 0.3000                 | 0.033           | -0.006          | 0.3000                | 0.012           | 0.000           | 0.3000                | 0.004           | 0.001           | 0.3000                 | -0.001          | 0.002           | 0.3000                 | 0.035           | -0.001          | 0.3000                 | 0.011           | -0.002          | 0.3000                 | 0.001           | -0.000          | 0.3000                 | 0.042           | -0.001          | 0.3000 | 0.042           | -0.001          |
| 0.3500                 | 0.002           | 0.000           | 0.3500                 | 0.040           | -0.002          | 0.3500                | 0.009           | -0.000          | 0.3500                | 0.006           | 0.001           | 0.3500                 | 0.000           | -0.001          | 0.3500                 | 0.030           | -0.002          | 0.3500                 | 0.011           | -0.001          | 0.3500                 | 0.000           | 0.000           | 0.3500                 | 0.040           | -0.000          | 0.3500 | 0.040           | -0.000          |
| 0.4000                 | 0.002           | 0.000           | 0.4000                 | 0.050           | -0.003          | 0.4000                | 0.006           | -0.001          | 0.4000                | 0.012           | -0.003          | 0.4000                 | 0.000           | -0.001          | 0.4000                 | 0.028           | -0.001          | 0.4000                 | 0.009           | -0.002          | 0.4000                 | 0.000           | -0.001          | 0.4000                 | 0.033           | -0.002          | 0.4000 | 0.033           | -0.002          |
| 0.4500                 | 0.004           | 0.000           | 0.4500                 | 0.130           | -0.009          | 0.4500                | 0.034           | -0.002          | 0.4500                | 0.033           | -0.002          | 0.4500                 | 0.000           | 0.002           | 0.4500                 | 0.043           | -0.001          | 0.4500                 | 0.007           | 0.001           | 0.4500                 | 0.004           | 0.001           | 0.4500                 | 0.038           | -0.002          | 0.4500 | 0.038           | -0.002          |
| 0.5000                 | 0.006           | -0.001          | 0.5000                 | 0.171           | -0.009          | 0.5000                | 0.048           | -0.002          | 0.5000                | 0.048           | -0.003          | 0.5000                 | 0.001           | 0.001           | 0.5000                 | 0.085           | -0.005          | 0.5000                 | 0.017           | -0.003          | 0.5000                 | 0.005           | -0.000          | 0.5000                 | 0.048           | -0.005          | 0.5000 | 0.048           | -0.005          |
| 0.5950                 | 0.006           | 0.000           | 0.5950                 | 0.171           | -0.003          | 0.5950                | 0.055           | -0.001          | 0.5950                | 0.049           | -0.000          | 0.5950                 | 0.004           | -0.001          | 0.5950                 | 0.131           | -0.003          | 0.5950                 | 0.029           | -0.002          | 0.5950                 | 0.006           | 0.000           | 0.5950                 | 0.063           | -0.001          | 0.5950 | 0.063           | -0.001          |
| 0.7050                 | 0.003           | -0.000          | 0.7050                 | 0.139           | -0.001          | 0.7050                | 0.056           | -0.001          | 0.7050                | 0.043           | -0.000          | 0.7050                 | -0.003          | 0.002           | 0.7050                 | 0.134           | -0.001          | 0.7050                 | 0.033           | -0.001          | 0.7050                 | 0.003           | -0.001          | 0.7050                 | 0.074           | -0.002          | 0.7050 | 0.074           | -0.002          |
| 0.8000                 | 0.004           | 0.001           | 0.8000                 | 0.095           | -0.000          | 0.8000                | 0.060           | 0.003           | 0.8000                | 0.051           | 0.002           | 0.8000                 | 0.003           | 0.003           | 0.8000                 | 0.141           | -0.001          | 0.8000                 | 0.031           | -0.002          | 0.8000                 | 0.006           | -0.001          | 0.8000                 | 0.082           | -0.003          | 0.8000 | 0.082           | -0.003          |
| 0.9000                 | 0.000           | -0.000          | 0.9000                 | 0.024           | -0.001          | 0.9000                | 0.006           | -0.001          | 0.9000                | 0.047           | -0.003          | 0.9000                 | 0.008           | -0.002          | 0.9000                 | 0.124           | -0.002          | 0.9000                 | 0.032           | 0.001           | 0.9000                 |                 |                 |                        |                 |                 |        |                 |                 |



TABLE IX.- SECTION COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $2y/b$  OF 0.175 AND 1.0 WERE OBTAINED BY EXTRAPOLATION  
(a) BVW

| 2y/b                    | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{cov}}$ C <sub>N<sub>W</sub></sub> | 2y/b                    | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{cov}}$ C <sub>N<sub>W</sub></sub> | 2y/b                    | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{cov}}$ C <sub>N<sub>W</sub></sub> | 2y/b                    | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{cov}}$ C <sub>N<sub>W</sub></sub> | 2y/b                   | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{cov}}$ C <sub>N<sub>W</sub></sub> |
|-------------------------|----------------------------|-----------------------------|-------------------------------------|------------------------------------------------|-------------------------|----------------------------|-----------------------------|-------------------------------------|------------------------------------------------|-------------------------|----------------------------|-----------------------------|-------------------------------------|------------------------------------------------|-------------------------|----------------------------|-----------------------------|-------------------------------------|------------------------------------------------|------------------------|----------------------------|-----------------------------|-------------------------------------|------------------------------------------------|
| M = 0.701    α = -04.28 |                            |                             |                                     |                                                | M = 0.904    α = 03.78  |                            |                             |                                     |                                                | M = 1.302    α = -00.15 |                            |                             |                                     |                                                | M = 1.703    α = 03.78  |                            |                             |                                     |                                                | M = 2.233    α = 12.19 |                            |                             |                                     |                                                |
| 0.175                   | -0.148                     | 0.543                       | 0.366                               | -0.245                                         | 0.175                   | 0.186                      | -0.0797                     | 0.429                               | 0.306                                          | 0.175                   | -0.008                     | 0.0077                      | 1.011                               | -0.012                                         | 0.175                   | 0.121                      | -0.0528                     | 0.437                               | 0.199                                          | 0.175                  | 0.270                      | -0.1134                     | 0.420                               | 0.446                                          |
| 0.200                   | -0.150                     | 0.535                       | 0.355                               | -0.240                                         | 0.200                   | 0.191                      | -0.0798                     | 0.418                               | 0.305                                          | 0.200                   | -0.005                     | 0.0054                      | 1.194                               | -0.007                                         | 0.200                   | 0.120                      | -0.0513                     | 0.428                               | 0.191                                          | 0.200                  | 0.281                      | -0.1197                     | 0.425                               | 0.450                                          |
| 0.250                   | -0.159                     | 0.539                       | 0.338                               | -0.239                                         | 0.250                   | 0.202                      | -0.0809                     | 0.400                               | 0.303                                          | 0.250                   | -0.001                     | 0.0024                      | 2.787                               | -0.001                                         | 0.250                   | 0.126                      | -0.0523                     | 0.413                               | 0.189                                          | 0.250                  | 0.306                      | -0.1327                     | 0.434                               | 0.459                                          |
| 0.300                   | -0.175                     | 0.569                       | 0.325                               | -0.245                                         | 0.300                   | 0.216                      | -0.0834                     | 0.387                               | 0.301                                          | 0.300                   | -0.000                     | 0.0015                      | 3.316                               | -0.001                                         | 0.300                   | 0.144                      | -0.0587                     | 0.407                               | 0.202                                          | 0.300                  | 0.334                      | -0.1465                     | 0.438                               | 0.467                                          |
| 0.400                   | -0.200                     | 0.639                       | 0.319                               | -0.240                                         | 0.400                   | 0.241                      | -0.0825                     | 0.343                               | 0.288                                          | 0.400                   | 0.001                      | -0.0000                     | 0.035                               | 0.001                                          | 0.400                   | 0.163                      | -0.0656                     | 0.402                               | 0.195                                          | 0.400                  | 0.355                      | -0.1612                     | 0.454                               | 0.425                                          |
| 0.600                   | -0.247                     | 0.584                       | 0.236                               | -0.197                                         | 0.600                   | 0.282                      | -0.0722                     | 0.257                               | 0.225                                          | 0.600                   | -0.021                     | 0.0157                      | 0.766                               | -0.016                                         | 0.600                   | 0.184                      | -0.0641                     | 0.349                               | 0.146                                          | 0.600                  | 0.371                      | -0.1706                     | 0.460                               | 0.296                                          |
| 0.800                   | -0.424                     | 1.450                       | 0.342                               | -0.169                                         | 0.800                   | 0.544                      | -0.2399                     | 0.441                               | 0.217                                          | 0.800                   | -0.010                     | 0.0080                      | 0.775                               | -0.004                                         | 0.800                   | 0.305                      | -0.1315                     | 0.431                               | 0.122                                          | 0.800                  | 0.411                      | -0.1945                     | 0.473                               | 0.164                                          |
| 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                  | 0.000                      | 0.000                       | 0.000                               | 0.000                                          |
| M = 0.698    α = -00.20 |                            |                             |                                     |                                                | M = 0.951    α = 03.87  |                            |                             |                                     |                                                | M = 1.303    α = 03.88  |                            |                             |                                     |                                                | M = 1.908    α = 03.93  |                            |                             |                                     |                                                | M = 2.227    α = 16.22 |                            |                             |                                     |                                                |
| 0.175                   | 0.013                      | -0.0058                     | 0.454                               | 0.021                                          | 0.175                   | 0.206                      | -0.0997                     | 0.484                               | 0.340                                          | 0.175                   | 0.140                      | -0.0587                     | 0.421                               | 0.230                                          | 0.175                   | 0.107                      | -0.0439                     | 0.409                               | 0.177                                          | 0.175                  | 0.367                      | -0.1620                     | 0.441                               | 0.606                                          |
| 0.200                   | 0.011                      | -0.0051                     | 0.460                               | 0.017                                          | 0.200                   | 0.215                      | -0.1034                     | 0.481                               | 0.343                                          | 0.200                   | 0.144                      | -0.0617                     | 0.429                               | 0.230                                          | 0.200                   | 0.109                      | -0.0444                     | 0.407                               | 0.174                                          | 0.200                  | 0.379                      | -0.1685                     | 0.445                               | 0.606                                          |
| 0.250                   | 0.010                      | -0.0053                     | 0.517                               | 0.015                                          | 0.250                   | 0.230                      | -0.1080                     | 0.470                               | 0.344                                          | 0.250                   | 0.158                      | -0.0687                     | 0.435                               | 0.237                                          | 0.250                   | 0.117                      | -0.0466                     | 0.399                               | 0.175                                          | 0.250                  | 0.404                      | -0.1823                     | 0.451                               | 0.606                                          |
| 0.300                   | 0.013                      | -0.0076                     | 0.599                               | 0.017                                          | 0.300                   | 0.242                      | -0.1091                     | 0.451                               | 0.338                                          | 0.300                   | 0.180                      | -0.0771                     | 0.429                               | 0.251                                          | 0.300                   | 0.130                      | -0.0506                     | 0.388                               | 0.182                                          | 0.300                  | 0.431                      | -0.1971                     | 0.457                               | 0.603                                          |
| 0.400                   | 0.015                      | -0.080                      | 0.529                               | 0.018                                          | 0.400                   | 0.282                      | -0.1249                     | 0.443                               | 0.338                                          | 0.400                   | 0.199                      | -0.0802                     | 0.403                               | 0.238                                          | 0.400                   | 0.151                      | -0.0589                     | 0.391                               | 0.180                                          | 0.400                  | 0.452                      | -0.2083                     | 0.461                               | 0.541                                          |
| 0.600                   | -0.003                     | 0.0018                      | 0.661                               | -0.002                                         | 0.600                   | 0.316                      | -0.1030                     | 0.326                               | 0.252                                          | 0.600                   | 0.221                      | -0.0722                     | 0.326                               | 0.177                                          | 0.600                   | 0.164                      | -0.0585                     | 0.356                               | 0.131                                          | 0.600                  | 0.462                      | -0.2170                     | 0.470                               | 0.369                                          |
| 0.800                   | 0.012                      | -0.0069                     | 0.587                               | 0.004                                          | 0.800                   | 0.618                      | -0.2851                     | 0.461                               | 0.247                                          | 0.800                   | 0.413                      | -0.1724                     | 0.418                               | 0.165                                          | 0.800                   | 0.249                      | -0.1130                     | 0.454                               | 0.099                                          | 0.800                  | 0.499                      | -0.2391                     | 0.479                               | 0.199                                          |
| 1.000                   | 0.000                      | 0.0000                      | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                  | 0.000                      | 0.000                       | 0.000                               | 0.000                                          |
| M = 0.697    α = 03.78  |                            |                             |                                     |                                                | M = 1.011    α = 03.98  |                            |                             |                                     |                                                | M = 1.302    α = 07.91  |                            |                             |                                     |                                                | M = 2.230    α = -03.73 |                            |                             |                                     |                                                |                        |                            |                             |                                     |                                                |
| 0.175                   | 0.164                      | -0.0611                     | 0.372                               | 0.271                                          | 0.175                   | 0.192                      | -0.0893                     | 0.465                               | 0.317                                          | 0.175                   | 0.300                      | -0.1295                     | 0.432                               | 0.495                                          | 0.175                   | -0.075                     | 0.364                       | 0.488                               | -0.123                                         |                        |                            |                             |                                     |                                                |
| 0.200                   | 0.168                      | -0.0612                     | 0.363                               | 0.269                                          | 0.200                   | 0.197                      | -0.0908                     | 0.462                               | 0.314                                          | 0.200                   | 0.304                      | -0.1310                     | 0.431                               | 0.486                                          | 0.200                   | -0.069                     | 0.314                       | 0.457                               | -0.110                                         |                        |                            |                             |                                     |                                                |
| 0.250                   | 0.179                      | -0.0631                     | 0.351                               | 0.269                                          | 0.250                   | 0.209                      | -0.0945                     | 0.453                               | 0.312                                          | 0.250                   | 0.326                      | -0.1379                     | 0.423                               | 0.488                                          | 0.250                   | -0.064                     | 0.269                       | 0.418                               | -0.096                                         |                        |                            |                             |                                     |                                                |
| 0.300                   | 0.195                      | -0.0671                     | 0.345                               | 0.272                                          | 0.300                   | 0.224                      | -0.0993                     | 0.442                               | 0.314                                          | 0.300                   | 0.365                      | -0.1496                     | 0.410                               | 0.510                                          | 0.300                   | -0.069                     | 0.295                       | 0.426                               | -0.096                                         |                        |                            |                             |                                     |                                                |
| 0.400                   | 0.221                      | -0.0709                     | 0.321                               | 0.265                                          | 0.400                   | 0.261                      | -0.1125                     | 0.431                               | 0.313                                          | 0.400                   | 0.402                      | -0.1593                     | 0.396                               | 0.482                                          | 0.400                   | -0.076                     | 0.306                       | 0.405                               | -0.090                                         |                        |                            |                             |                                     |                                                |
| 0.600                   | 0.249                      | -0.0571                     | 0.230                               | 0.199                                          | 0.600                   | 0.290                      | -0.0908                     | 0.313                               | 0.232                                          | 0.600                   | 0.560                      | -0.2303                     | 0.411                               | 0.447                                          | 0.600                   | -0.108                     | 0.060                       | 0.425                               | -0.086                                         |                        |                            |                             |                                     |                                                |
| 0.800                   | 0.455                      | -0.1774                     | 0.390                               | 0.182                                          | 0.800                   | 0.583                      | -0.2748                     | 0.471                               | 0.233                                          | 0.800                   | 0.676                      | -0.3308                     | 0.489                               | 0.270                                          | 0.800                   | -0.122                     | 0.0542                      | 0.444                               | -0.048                                         |                        |                            |                             |                                     |                                                |
| 1.000                   | 0.000                      | 0.0000                      | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          |                        |                            |                             |                                     |                                                |
| M = 0.701    α = 07.66  |                            |                             |                                     |                                                | M = 1.049    α = 03.98  |                            |                             |                                     |                                                | M = 1.302    α = 11.89  |                            |                             |                                     |                                                | M = 2.237    α = 00.20  |                            |                             |                                     |                                                |                        |                            |                             |                                     |                                                |
| 0.175                   | 0.342                      | -0.1195                     | 0.350                               | 0.564                                          | 0.175                   | 0.184                      | -0.0855                     | 0.465                               | 0.303                                          | 0.175                   | 0.441                      | -0.1856                     | 0.420                               | 0.729                                          | 0.175                   | -0.003                     | 0.0061                      | 2.013                               | -0.004                                         |                        |                            |                             |                                     |                                                |
| 0.200                   | 0.340                      | -0.1159                     | 0.341                               | 0.543                                          | 0.200                   | 0.188                      | -0.0872                     | 0.463                               | 0.301                                          | 0.200                   | 0.453                      | -0.1876                     | 0.414                               | 0.725                                          | 0.200                   | 0.003                      | 0.0014                      | 0.499                               | 0.004                                          |                        |                            |                             |                                     |                                                |
| 0.250                   | 0.357                      | -0.1159                     | 0.325                               | 0.535                                          | 0.250                   | 0.201                      | -0.0919                     | 0.457                               | 0.301                                          | 0.250                   | 0.490                      | -0.1978                     | 0.404                               | 0.734                                          | 0.250                   | 0.014                      | -0.0051                     | 0.370                               | 0.020                                          |                        |                            |                             |                                     |                                                |
| 0.300                   | 0.401                      | -0.1256                     | 0.313                               | 0.561                                          | 0.300                   | 0.218                      | -0.0981                     | 0.450                               | 0.305                                          | 0.300                   | 0.544                      | -0.2164                     | 0.398                               | 0.761                                          | 0.300                   | 0.024                      | -0.0081                     | 0.341                               | 0.033                                          |                        |                            |                             |                                     |                                                |
| 0.400                   | 0.462                      | -0.1283                     | 0.278                               | 0.554                                          | 0.400                   | 0.251                      | -0.1093                     | 0.435                               | 0.301                                          | 0.400                   | 0.638                      | -0.2564                     | 0.402                               | 0.765                                          | 0.400                   | 0.018                      | -0.0075                     | 0.410                               | 0.021                                          |                        |                            |                             |                                     |                                                |
| 0.600                   | 0.638                      | -0.1942                     | 0.304                               | 0.510                                          | 0.600                   | 0.277                      | -0.0900                     | 0.325                               | 0.221                                          | 0.600                   | 0.856                      | -0.4255                     | 0.497                               | 0.684                                          | 0.600                   | 0.010                      | -0.0006                     | 0.062                               | 0.007                                          |                        |                            |                             |                                     |                                                |
| 0.800                   | 0.676                      | -0.3134                     | 0.463                               | 0.270                                          | 0.800                   | 0.552                      | -0.2512                     | 0.455                               | 0.220                                          | 0.800                   | 0.832                      | -0.4055                     | 0.487                               | 0.332                                          | 0.800                   | 0.028                      | -0.0137                     | 0.483                               | 0.011                                          |                        |                            |                             |                                     |                                                |
| 1.000                   | 0.000                      | 0.0000                      | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          |                        |                            |                             |                                     |                                                |
| M = 0.697    α = 11.79  |                            |                             |                                     |                                                | M = 1.103    α = 03.98  |                            |                             |                                     |                                                | M = 1.302    α = 15.87  |                            |                             |                                     |                                                | M = 2.235    α = 04.18  |                            |                             |                                     |                                                |                        |                            |                             |                                     |                                                |
| 0.175                   | 0.472                      | -0.1538                     | 0.326                               | 0.779                                          | 0.175                   | 0.181                      | -0.0825                     | 0.457                               | 0.298                                          | 0.175                   | 0.664                      | -0.3129                     | 0.471                               | 1.097                                          | 0.175                   | 0.083                      | -0.0310                     | 0.372                               | 0.137                                          |                        |                            |                             |                                     |                                                |
| 0.200                   | 0.487                      | -0.1485                     | 0.305                               | 0.779                                          | 0.200                   | 0.185                      | -0.0856                     | 0.462                               | 0.296                                          | 0.200                   | 0.658                      | -0.2891                     | 0.439                               | 1.053                                          | 0.200                   | 0.091                      | -0.0359                     | 0.393                               | 0.146                                          |                        |                            |                             |                                     |                                                |
| 0.250                   | 0.532                      | -0.1497                     | 0.282                               | 0.797                                          | 0.250                   | 0.198                      | -0.0915                     | 0.461                               | 0.297                                          | 0.250                   | 0.683                      | -0.2757                     | 0.403                               | 1.025                                          | 0.250                   | 0.106                      | -0.0435                     | 0.408                               | 0.159                                          |                        |                            |                             |                                     |                                                |
| 0.300                   | 0.595                      | -0.1665                     | 0.280                               | 0.832                                          | 0.300                   | 0.217                      | -0.0971                     | 0.447                               | 0.303                                          | 0.300                   | 0.756                      | -0.3066                     | 0.406                               | 1.058                                          | 0.300                   | 0.119                      | -0.0481                     | 0.403                               | 0.167                                          |                        |                            |                             |                                     |                                                |
| 0.400                   | 0.675                      | -0.1664                     | 0.247                               | 0.809                                          | 0.400                   | 0.247                      | -0.1062                     | 0.429                               | 0.296                                          | 0.400                   | 0.906                      | -0.4161                     | 0.459                               | 1.087                                          | 0.400                   | 0.130                      | -0.0541                     | 0.415                               | 0.156                                          |                        |                            |                             |                                     |                                                |
| 0.600                   | 0.743                      | -0.3013                     | 0.406                               | 0.594                                          | 0.600                   | 0.268                      | -0.0829                     | 0.310                               | 0.214                                          | 0.600                   | 0.938                      | -0.4563                     | 0.487                               | 0.750                                          | 0.600                   | 0.146                      | -0.0590                     | 0.404                               | 0.116                                          |                        |                            |                             |                                     |                                                |
| 0.800                   | 0.538                      | -0.2360                     | 0.439                               | 0.215                                          | 0.800                   | 0.537                      | -0.2354                     | 0.438                               | 0.214                                          | 0.800                   | 0.883                      | -0.4448                     | 0.504                               | 0.353                                          | 0.800                   | 0.188                      | -0.0854                     | 0.455                               | 0.079                                          |                        |                            |                             |                                     |                                                |
| 1.000                   | 0.000                      | 0.0000                      | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          | 1.000                   | 0.000                      | 0.000                       | 0.000                               | 0.000                                          |                        |                            |                             |                                     |                                                |
| M = 0.701    α = 15.76  |                            |                             |                                     |                                                | M = 1.302    α = -04.18 |                            |                             |                                     |                                                | M = 1.499    α = 03.83  |                            |                             |                                     |                                                | M = 2.234    α = 08.21  |                            |                             |                                     |                                                |                        |                            |                             |                                     |                                                |
| 0.175                   | 0.658                      | -0.2116                     | 0.322                               | 1.086                                          | 0.175                   | -0.146                     | 0.0713                      | 0.488                               | -0.241                                         | 0.175                   | 0.127                      | -0.0552                     | 0.434                               | 0.210                                          | 0.175                   | 0.182                      | -0.0735                     | 0.405                               | 0.300                                          |                        |                            |                             |                                     |                                                |
| 0.200                   | 0.703                      | -0.2193                     | 0.312                               | 1.125                                          | 0.200                   | -0.149                     | 0.0707                      | 0.475                               | -0.238                                         | 0.200                   | 0.130                      | -0.0563                     | 0.435                               | 0.207                                          | 0.200                   | 0.189                      | -0.0777                     | 0.410                               | 0.302                                          |                        |                            |                             |                                     |                                                |
| 0.250                   | 0.793                      | -0.2412                     | 0.304                               | 1.188                                          | 0.250                   | -0.156                     | 0.0708                      | 0.453                               | -0.234                                         | 0.250                   | 0.139                      | -0.0595                     | 0.429                               | 0.207                                          | 0.250                   | 0.208                      | -0.0867                     | 0.416                               | 0.302                                          |                        |                            |                             |                                     |                                                |
| 0.300                   | 0.882                      | -0.2721                     | 0.309                               | 1.234                                          | 0.300                   | -0.166                     | 0.0728                      | 0.438                               | -0.232                                         | 0.300                   | 0.154                      | -0.0640                     | 0.417                               | 0.214                                          | 0.300                   | 0.233                      | -0.0968                     | 0.410                               | 0.302                                          |                        |                            |                             |                                     |                                                |
| 0.400                   | 0.991                      | -0.3223                     | 0.289                               | 1.325                                          | 0.400                   | -0.194                     | 0.0831                      | 0.428                               | -0.                                            |                         |                            |                             |                                     |                                                |                         |                            |                             |                                     |                                                |                        |                            |                             |                                     |                                                |



TABLE IX.- SECTION COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $2y/b$  OF 0.175 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = -0.5^\circ$

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| 2y/b                     | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{ov}}$ C <sub>N<sub>W</sub></sub> | 2y/b                     | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{ov}}$ C <sub>N<sub>W</sub></sub> | 2y/b                     | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{ov}}$ C <sub>N<sub>W</sub></sub> | 2y/b                     | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{ov}}$ C <sub>N<sub>W</sub></sub> | 2y/b                   | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{ov}}$ C <sub>N<sub>W</sub></sub> |
|--------------------------|----------------------------|-----------------------------|-------------------------------------|-----------------------------------------------|--------------------------|----------------------------|-----------------------------|-------------------------------------|-----------------------------------------------|--------------------------|----------------------------|-----------------------------|-------------------------------------|-----------------------------------------------|--------------------------|----------------------------|-----------------------------|-------------------------------------|-----------------------------------------------|------------------------|----------------------------|-----------------------------|-------------------------------------|-----------------------------------------------|
| M = 0.700    α = -0.4.28 |                            |                             |                                     |                                               | M = 0.905    α = 0.3.73  |                            |                             |                                     |                                               | M = 1.299    α = -0.0.20 |                            |                             |                                     |                                               | M = 1.698    α = 0.3.83  |                            |                             |                                     |                                               | M = 2.231    α = 12.24 |                            |                             |                                     |                                               |
| 0.175                    | -0.114                     | 0.0498                      | 0.437                               | -0.188                                        | 0.175                    | 0.148                      | -0.0697                     | 0.472                               | 0.243                                         | 0.175                    | -0.003                     | 0.0054                      | 1.640                               | -0.005                                        | 0.175                    | 0.085                      | -0.0424                     | 0.500                               | 0.140                                         | 0.175                  | 0.248                      | -0.1085                     | 0.437                               | 0.41                                          |
| 0.200                    | -0.121                     | 0.0519                      | 0.429                               | -0.193                                        | 0.200                    | 0.152                      | -0.0713                     | 0.469                               | 0.243                                         | 0.200                    | -0.002                     | 0.0052                      | 2.554                               | -0.003                                        | 0.200                    | 0.092                      | -0.0455                     | 0.495                               | 0.147                                         | 0.200                  | 0.265                      | -0.1166                     | 0.440                               | 0.42                                          |
| 0.250                    | -0.135                     | 0.0549                      | 0.407                               | -0.202                                        | 0.250                    | 0.163                      | -0.0735                     | 0.451                               | 0.244                                         | 0.250                    | 0.000                      | 0.0037                      | 0.000                               | 0.000                                         | 0.250                    | 0.105                      | -0.0502                     | 0.477                               | 0.157                                         | 0.250                  | 0.290                      | -0.1280                     | 0.442                               | 0.43                                          |
| 0.300                    | -0.149                     | 0.0564                      | 0.379                               | -0.208                                        | 0.300                    | 0.176                      | -0.0742                     | 0.422                               | 0.246                                         | 0.300                    | 0.003                      | 0.0007                      | -0.287                              | 0.003                                         | 0.300                    | 0.116                      | -0.0525                     | 0.452                               | 0.162                                         | 0.300                  | 0.305                      | -0.1335                     | 0.437                               | 0.42                                          |
| 0.400                    | -0.179                     | 0.0589                      | 0.329                               | -0.215                                        | 0.400                    | 0.201                      | -0.0719                     | 0.358                               | 0.240                                         | 0.400                    | 0.001                      | -0.0002                     | 0.342                               | 0.000                                         | 0.400                    | 0.139                      | -0.0596                     | 0.428                               | 0.167                                         | 0.400                  | 0.337                      | -0.1506                     | 0.447                               | 0.40                                          |
| 0.600                    | -0.254                     | 0.0628                      | 0.247                               | -0.203                                        | 0.600                    | 0.268                      | -0.0729                     | 0.272                               | 0.214                                         | 0.600                    | -0.023                     | 0.0165                      | 0.707                               | -0.018                                        | 0.600                    | 0.181                      | -0.0646                     | 0.357                               | 0.144                                         | 0.600                  | 0.375                      | -0.1730                     | 0.461                               | 0.30                                          |
| 0.800                    | -0.435                     | 0.1536                      | 0.353                               | -0.173                                        | 0.800                    | 0.527                      | -0.2227                     | 0.423                               | 0.210                                         | 0.800                    | -0.015                     | 0.0098                      | 0.641                               | -0.006                                        | 0.800                    | 0.302                      | -0.1262                     | 0.419                               | 0.120                                         | 0.800                  | 0.413                      | -0.1959                     | 0.474                               | 0.16                                          |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                  | 0.000                      | 0.0000                      | 0.000                               | 0.00                                          |
| M = 0.698    α = -0.0.15 |                            |                             |                                     |                                               | M = 0.955    α = 0.3.78  |                            |                             |                                     |                                               | M = 1.301    α = 0.3.69  |                            |                             |                                     |                                               | M = 1.893    α = 0.4.03  |                            |                             |                                     |                                               | M = 2.224    α = 16.22 |                            |                             |                                     |                                               |
| 0.175                    | 0.010                      | -0.0060                     | 0.627                               | 0.015                                         | 0.175                    | 0.161                      | -0.0864                     | 0.537                               | 0.266                                         | 0.175                    | 0.095                      | -0.0474                     | 0.497                               | 0.157                                         | 0.175                    | 0.085                      | -0.0381                     | 0.449                               | 0.140                                         | 0.175                  | 0.323                      | -0.1436                     | 0.445                               | 0.53                                          |
| 0.200                    | 0.010                      | -0.0054                     | 0.564                               | 0.015                                         | 0.200                    | 0.171                      | -0.0903                     | 0.527                               | 0.274                                         | 0.200                    | 0.105                      | -0.0514                     | 0.490                               | 0.168                                         | 0.200                    | 0.093                      | -0.0421                     | 0.454                               | 0.148                                         | 0.200                  | 0.350                      | -0.1587                     | 0.454                               | 0.55                                          |
| 0.250                    | 0.009                      | -0.0047                     | 0.515                               | 0.013                                         | 0.250                    | 0.190                      | -0.0973                     | 0.513                               | 0.284                                         | 0.250                    | 0.122                      | -0.0589                     | 0.483                               | 0.182                                         | 0.250                    | 0.106                      | -0.0473                     | 0.446                               | 0.158                                         | 0.250                  | 0.389                      | -0.1797                     | 0.462                               | 0.58                                          |
| 0.300                    | 0.009                      | -0.0049                     | 0.571                               | 0.011                                         | 0.300                    | 0.205                      | -0.1035                     | 0.505                               | 0.287                                         | 0.300                    | 0.136                      | -0.0657                     | 0.483                               | 0.190                                         | 0.300                    | 0.116                      | -0.0486                     | 0.419                               | 0.162                                         | 0.300                  | 0.411                      | -0.1893                     | 0.461                               | 0.57                                          |
| 0.400                    | 0.009                      | -0.0051                     | 0.584                               | 0.010                                         | 0.400                    | 0.242                      | -0.1115                     | 0.460                               | 0.290                                         | 0.400                    | 0.158                      | -0.0673                     | 0.425                               | 0.190                                         | 0.400                    | 0.134                      | -0.0534                     | 0.399                               | 0.160                                         | 0.400                  | 0.430                      | -0.1983                     | 0.461                               | 0.51                                          |
| 0.600                    | -0.007                     | 0.0029                      | 0.438                               | -0.005                                        | 0.600                    | 0.305                      | -0.1047                     | 0.343                               | 0.244                                         | 0.600                    | 0.200                      | -0.0676                     | 0.339                               | 0.159                                         | 0.600                    | 0.176                      | -0.0646                     | 0.366                               | 0.141                                         | 0.600                  | 0.458                      | -0.2158                     | 0.471                               | 0.36                                          |
| 0.800                    | 0.005                      | -0.0045                     | 0.877                               | 0.002                                         | 0.800                    | 0.585                      | -0.2551                     | 0.436                               | 0.234                                         | 0.800                    | 0.364                      | -0.1435                     | 0.394                               | 0.145                                         | 0.800                    | 0.262                      | -0.1186                     | 0.453                               | 0.104                                         | 0.800                  | 0.496                      | -0.2378                     | 0.479                               | 0.19                                          |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                  | 0.000                      | 0.0000                      | 0.000                               | 0.00                                          |
| M = 0.696    α = 0.3.68  |                            |                             |                                     |                                               | M = 1.005    α = 0.3.88  |                            |                             |                                     |                                               | M = 1.299    α = 0.7.76  |                            |                             |                                     |                                               | M = 2.234    α = -0.3.83 |                            |                             |                                     |                                               | M    α                 |                            |                             |                                     |                                               |
| 0.175                    | 0.126                      | -0.0482                     | 0.383                               | 0.207                                         | 0.175                    | 0.155                      | -0.0850                     | 0.549                               | 0.255                                         | 0.175                    | 0.239                      | -0.1161                     | 0.486                               | 0.394                                         | 0.175                    | 0.069                      | -0.0391                     | 0.570                               | -0.113                                        |                        |                            |                             |                                     |                                               |
| 0.200                    | 0.137                      | -0.0557                     | 0.408                               | 0.218                                         | 0.200                    | 0.160                      | -0.0860                     | 0.536                               | 0.256                                         | 0.200                    | 0.252                      | -0.1231                     | 0.489                               | 0.402                                         | 0.200                    | 0.063                      | -0.0333                     | 0.529                               | -0.100                                        |                        |                            |                             |                                     |                                               |
| 0.250                    | 0.152                      | -0.0629                     | 0.415                               | 0.227                                         | 0.250                    | 0.174                      | -0.0895                     | 0.516                               | 0.260                                         | 0.250                    | 0.276                      | -0.1337                     | 0.484                               | 0.41                                          | 0.250                    | 0.059                      | -0.0282                     | 0.479                               | -0.088                                        |                        |                            |                             |                                     |                                               |
| 0.300                    | 0.158                      | -0.0598                     | 0.378                               | 0.221                                         | 0.300                    | 0.190                      | -0.0953                     | 0.501                               | 0.266                                         | 0.300                    | 0.299                      | -0.1401                     | 0.468                               | 0.418                                         | 0.300                    | -0.064                     | -0.0317                     | 0.493                               | -0.089                                        |                        |                            |                             |                                     |                                               |
| 0.400                    | 0.188                      | -0.0626                     | 0.333                               | 0.225                                         | 0.400                    | 0.226                      | -0.1032                     | 0.456                               | 0.271                                         | 0.400                    | 0.341                      | -0.1459                     | 0.427                               | 0.409                                         | 0.400                    | -0.083                     | -0.0351                     | 0.421                               | -0.100                                        |                        |                            |                             |                                     |                                               |
| 0.600                    | 0.241                      | -0.0595                     | 0.246                               | 0.193                                         | 0.600                    | 0.283                      | -0.0949                     | 0.336                               | 0.226                                         | 0.600                    | 0.502                      | -0.1982                     | 0.394                               | 0.401                                         | 0.600                    | -0.123                     | -0.0512                     | 0.417                               | -0.098                                        |                        |                            |                             |                                     |                                               |
| 0.800                    | 0.443                      | -0.1665                     | 0.376                               | 0.177                                         | 0.800                    | 0.543                      | -0.2303                     | 0.424                               | 0.217                                         | 0.800                    | 0.669                      | -0.3327                     | 0.497                               | 0.267                                         | 0.800                    | -0.145                     | -0.0646                     | 0.445                               | -0.058                                        |                        |                            |                             |                                     |                                               |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         |                        |                            |                             |                                     |                                               |
| M = 0.695    α = 0.7.85  |                            |                             |                                     |                                               | M = 1.044    α = 0.3.88  |                            |                             |                                     |                                               | M = 1.296    α = 11.79   |                            |                             |                                     |                                               | M = 2.233    α = 0.0.15  |                            |                             |                                     |                                               | M    α                 |                            |                             |                                     |                                               |
| 0.175                    | 0.277                      | -0.1076                     | 0.388                               | 0.458                                         | 0.175                    | 0.145                      | -0.0749                     | 0.516                               | 0.239                                         | 0.175                    | 0.378                      | -0.1690                     | 0.447                               | 0.623                                         | 0.175                    | -0.006                     | -0.0066                     | 1.194                               | -0.009                                        |                        |                            |                             |                                     |                                               |
| 0.200                    | 0.294                      | -0.1133                     | 0.386                               | 0.469                                         | 0.200                    | 0.151                      | -0.0781                     | 0.518                               | 0.241                                         | 0.200                    | 0.391                      | -0.1766                     | 0.452                               | 0.625                                         | 0.200                    | 0.002                      | -0.0015                     | -0.857                              | 0.002                                         |                        |                            |                             |                                     |                                               |
| 0.250                    | 0.317                      | -0.1176                     | 0.372                               | 0.474                                         | 0.250                    | 0.164                      | -0.0840                     | 0.511                               | 0.246                                         | 0.250                    | 0.422                      | -0.1907                     | 0.452                               | 0.633                                         | 0.250                    | 0.013                      | -0.0047                     | 0.362                               | 0.019                                         |                        |                            |                             |                                     |                                               |
| 0.300                    | 0.327                      | -0.1127                     | 0.345                               | 0.457                                         | 0.300                    | 0.181                      | -0.0892                     | 0.494                               | 0.252                                         | 0.300                    | 0.461                      | -0.2036                     | 0.442                               | 0.645                                         | 0.300                    | 0.020                      | -0.0057                     | 0.288                               | 0.027                                         |                        |                            |                             |                                     |                                               |
| 0.400                    | 0.387                      | -0.1099                     | 0.284                               | 0.463                                         | 0.400                    | 0.211                      | -0.0953                     | 0.452                               | 0.252                                         | 0.400                    | 0.520                      | -0.2111                     | 0.406                               | 0.623                                         | 0.400                    | 0.017                      | -0.0073                     | 0.420                               | 0.020                                         |                        |                            |                             |                                     |                                               |
| 0.600                    | 0.605                      | -0.1778                     | 0.294                               | 0.484                                         | 0.600                    | 0.268                      | -0.0907                     | 0.338                               | 0.214                                         | 0.600                    | 0.803                      | -0.3898                     | 0.486                               | 0.642                                         | 0.600                    | 0.011                      | -0.0020                     | 0.182                               | 0.008                                         |                        |                            |                             |                                     |                                               |
| 0.800                    | 0.744                      | -0.3512                     | 0.472                               | 0.297                                         | 0.800                    | 0.510                      | -0.2137                     | 0.419                               | 0.204                                         | 0.800                    | 0.811                      | -0.3962                     | 0.489                               | 0.324                                         | 0.800                    | 0.027                      | -0.0133                     | 0.491                               | 0.010                                         |                        |                            |                             |                                     |                                               |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         |                        |                            |                             |                                     |                                               |
| M = 0.700    α = 11.79   |                            |                             |                                     |                                               | M = 1.102    α = 0.3.93  |                            |                             |                                     |                                               | M = 1.299    α = 15.82   |                            |                             |                                     |                                               | M = 2.231    α = 0.4.18  |                            |                             |                                     |                                               | M    α                 |                            |                             |                                     |                                               |
| 0.175                    | 0.441                      | -0.1585                     | 0.360                               | 0.728                                         | 0.175                    | 0.135                      | -0.0649                     | 0.482                               | 0.222                                         | 0.175                    | 0.573                      | -0.2724                     | 0.476                               | 0.946                                         | 0.175                    | 0.066                      | -0.0253                     | 0.383                               | 0.109                                         |                        |                            |                             |                                     |                                               |
| 0.200                    | 0.461                      | -0.1672                     | 0.363                               | 0.737                                         | 0.200                    | 0.142                      | -0.0690                     | 0.487                               | 0.226                                         | 0.200                    | 0.580                      | -0.2664                     | 0.459                               | 0.928                                         | 0.200                    | 0.078                      | -0.0333                     | 0.427                               | 0.124                                         |                        |                            |                             |                                     |                                               |
| 0.250                    | 0.492                      | -0.1717                     | 0.349                               | 0.737                                         | 0.250                    | 0.157                      | -0.0757                     | 0.483                               | 0.235                                         | 0.250                    | 0.607                      | -0.2645                     | 0.435                               | 0.911                                         | 0.250                    | 0.096                      | -0.0428                     | 0.445                               | 0.144                                         |                        |                            |                             |                                     |                                               |
| 0.300                    | 0.510                      | -0.1592                     | 0.313                               | 0.713                                         | 0.300                    | 0.174                      | -0.0807                     | 0.463                               | 0.243                                         | 0.300                    | 0.651                      | -0.2758                     | 0.423                               | 0.911                                         | 0.300                    | 0.107                      | -0.0439                     | 0.412                               | 0.149                                         |                        |                            |                             |                                     |                                               |
| 0.400                    | 0.603                      | -0.1578                     | 0.262                               | 0.723                                         | 0.400                    | 0.200                      | -0.0839                     | 0.419                               | 0.239                                         | 0.400                    | 0.763                      | -0.3288                     | 0.431                               | 0.915                                         | 0.400                    | 0.121                      | -0.0496                     | 0.411                               | 0.144                                         |                        |                            |                             |                                     |                                               |
| 0.600                    | 0.906                      | -0.3138                     | 0.346                               | 0.724                                         | 0.600                    | 0.251                      | -0.0758                     | 0.302                               | 0.200                                         | 0.600                    | 0.919                      | -0.4480                     | 0.487                               | 0.735                                         | 0.600                    | 0.152                      | -0.0605                     | 0.399                               | 0.121                                         |                        |                            |                             |                                     |                                               |
| 0.800                    | 0.883                      | -0.3744                     | 0.424                               | 0.353                                         | 0.800                    | 0.503                      | -0.2191                     | 0.435                               | 0.201                                         | 0.800                    | 0.858                      | -0.4348                     | 0.507                               | 0.343                                         | 0.800                    | 0.196                      | -0.0884                     | 0.452                               | 0.078                                         |                        |                            |                             |                                     |                                               |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         | 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000                                         |                        |                            |                             |                                     |                                               |
| M = 0.702    α = 15.91   |                            |                             |                                     |                                               | M = 1.298    α = -0.4.13 |                            |                             |                                     |                                               | M = 1.498    α = 0.3.68  |                            |                             |                                     |                                               | M = 2.234    α = 0.8.16  |                            |                             |                                     |                                               | M    α                 |                            |                             |                                     |                                               |
| 0.175                    | 0.622                      | -0.2145                     | 0.345                               | 1.027                                         | 0.175                    | -0.110                     | 0.0658                      | 0.600                               | -0.181                                        | 0.175                    | 0.092                      | -0.0475                     | 0.514                               | 0.152                                         | 0.175                    | 0.158                      | -0.0672                     | 0.426                               | 0.260                                         |                        |                            |                             |                                     |                                               |
| 0.200                    | 0.625                      | -0.2087                     | 0.334                               | 0.999                                         | 0.200                    | -0.112                     | 0.0644                      | 0.576                               | -0.178                                        | 0.200                    | 0.097                      | -0.0487                     | 0.502                               | 0.155                                         | 0.200                    | 0.171                      | -0.0742                     | 0.435                               | 0.273                                         |                        |                            |                             |                                     |                                               |
| 0.250                    | 0.650                      | -0.2024                     | 0.311                               | 0.974                                         | 0.250                    | -0.119                     | 0.0637                      | 0.536                               | -0.178                                        | 0.250                    | 0.108                      | -0.0525                     | 0.484                               | 0.162                                         | 0.250                    | 0.192                      | -0.0837                     | 0.437                               | 0.287                                         |                        |                            |                             |                                     |                                               |
| 0.300                    | 0.701                      | -0.2028                     | 0.289                               | 0.981                                         | 0.300                    | -0.130                     | 0.0657                      | 0.505                               | -0.182                                        | 0.300                    | 0.123                      | -0.0581                     | 0.471                               | 0.172                                         | 0.300                    | 0.206                      | -0.0872                     | 0.423                               | 0.288                                         |                        |                            |                             |                                     |                                               |
| 0.400                    | 0.793                      | -0.1939                     | 0.257                               | 0.944                                         | 0.400                    | -0.146                     | 0.0739                      | 0.429                               | -0.146                                        | 0.400                    | 0.129                      | -0.0629                     | 0.432                               | 0.174                                         | 0.400                    | 0.235                      | -0.0997                     | 0.425                               | 0.281                                         |                        |                            |                             |                                     |                                               |
| 0.600                    | 0.866                      | -0.3670                     | 0.424                               | 0.692                                         | 0.600                    | -0.240                     | 0.0939                      | 0.392                               | -0.191                                        | 0.600                    | 0.                         |                             |                                     |                                               |                          |                            |                             |                                     |                                               |                        |                            |                             |                                     |                                               |



TABLE IX.- SECTION COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $2y/b$  OF 0.175 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(c) BVWC;  $\delta = 10.2^\circ$

| 2y/b                         | C <sub>NW</sub> | C <sub>mLE</sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{C}{C_{ov}}$ | C <sub>NW</sub>             | C <sub>mLE</sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{C}{C_{ov}}$ | C <sub>NW</sub> | C <sub>mLE</sub>            | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{C}{C_{ov}}$ | C <sub>NW</sub> | C <sub>mLE</sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{C}{C_{ov}}$ | C <sub>NW</sub> | C <sub>mLE</sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{C}{C_{ov}}$         | C <sub>NW</sub> | C <sub>mLE</sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{C}{C_{ov}}$ |
|------------------------------|-----------------|------------------|-------------------------------------|--------------------|-----------------------------|------------------|-------------------------------------|--------------------|-----------------|-----------------------------|-------------------------------------|--------------------|-----------------|------------------|-------------------------------------|--------------------|-----------------|------------------|-------------------------------------|----------------------------|-----------------|------------------|-------------------------------------|--------------------|
| M = 0.697 $\alpha = -0.4.42$ |                 |                  |                                     |                    | M = 0.903 $\alpha = 03.78$  |                  |                                     |                    |                 | M = 1.303 $\alpha = -00.10$ |                                     |                    |                 |                  | M = 1.703 $\alpha = 03.73$          |                    |                 |                  |                                     | M = 2.232 $\alpha = 12.24$ |                 |                  |                                     |                    |
| 0.175                        | -0.164          | 0.541            | 0.329                               | -0.271             | 0.175                       | 0.067            | -0.0636                             | 0.953              | 0.110           | 0.175                       | -0.071                              | 0.188              | 0.264           | -0.117           | 0.175                               | 0.021              | -0.0287         | 1.359            | 0.034                               | 0.175                      | 0.221           | -0.0999          | 0.453                               | 0.364              |
| 0.200                        | -0.167          | 0.543            | 0.325                               | -0.267             | 0.200                       | 0.049            | -0.0639                             | 1.300              | 0.078           | 0.200                       | -0.064                              | 0.134              | 0.210           | -0.102           | 0.200                               | 0.025              | -0.0333         | 1.345            | 0.039                               | 0.200                      | 0.238           | -0.1080          | 0.455                               | 0.380              |
| 0.250                        | -0.178          | 0.562            | 0.315                               | -0.267             | 0.250                       | 0.045            | -0.0665                             | 1.492              | 0.066           | 0.250                       | -0.061                              | 0.086              | 0.140           | -0.091           | 0.250                               | 0.032              | -0.0388         | 1.211            | 0.048                               | 0.250                      | 0.267           | -0.1206          | 0.452                               | 0.399              |
| 0.300                        | -0.197          | 0.600            | 0.304                               | -0.276             | 0.300                       | 0.080            | -0.0720                             | 0.900              | 0.112           | 0.300                       | -0.074                              | 0.114              | 0.155           | -0.103           | 0.300                               | 0.040              | -0.0398         | 1.003            | 0.055                               | 0.300                      | 0.290           | -0.1295          | 0.443                               | 0.405              |
| 0.400                        | -0.215          | 0.645            | 0.300                               | -0.258             | 0.400                       | 0.216            | -0.0883                             | 0.409              | 0.259           | 0.400                       | -0.022                              | 0.0045             | 0.206           | -0.026           | 0.400                               | 0.134              | -0.0606         | 0.452            | 0.161                               | 0.400                      | 0.315           | -0.1379          | 0.438                               | 0.377              |
| 0.600                        | -0.263          | 0.613            | 0.233                               | -0.210             | 0.600                       | 0.274            | -0.0728                             | 0.266              | 0.219           | 0.600                       | -0.030                              | 0.177              | 0.585           | -0.024           | 0.600                               | 0.175              | -0.0646         | 0.370            | 0.139                               | 0.600                      | 0.355           | -0.1641          | 0.462                               | 0.284              |
| 0.800                        | -0.449          | 1.635            | 0.364                               | -0.179             | 0.800                       | 0.528            | -0.2177                             | 0.12               | 0.211           | 0.800                       | -0.023                              | 0.147              | 0.627           | -0.009           | 0.800                               | 0.279              | -0.1150         | 0.413            | 0.111                               | 0.800                      | 0.398           | -0.1884          | 0.474                               | 0.159              |
| 1.000                        | 0.000           | 0.000            | 0.000                               | 0.000              | 1.000                       | 0.000            | 0.000                               | 0.000              | 0.000           | 1.000                       | 0.000                               | 0.000              | 0.000           | 0.000            | 1.000                               | 0.000              | 0.000           | 0.000            | 0.000                               | 1.000                      | 0.000           | 0.000            | 0.000                               | 0.000              |
| M = 0.696 $\alpha = -00.06$  |                 |                  |                                     |                    | M = 0.951 $\alpha = 03.82$  |                  |                                     |                    |                 | M = 1.304 $\alpha = 03.78$  |                                     |                    |                 |                  | M = 1.909 $\alpha = 03.93$          |                    |                 |                  |                                     | M = 2.232 $\alpha = 16.26$ |                 |                  |                                     |                    |
| 0.175                        | -0.043          | 0.001            | 0.002                               | -0.071             | 0.175                       | 0.084            | -0.0849                             | 1.007              | 0.139           | 0.175                       | 0.019                               | -0.036             | 1.756           | 0.031            | 0.175                               | 0.027              | -0.0215         | 0.807            | 0.043                               | 0.175                      | 0.300           | -0.1446          | 0.482                               | 0.496              |
| 0.200                        | -0.045          | -0.018           | -0.040                              | -0.071             | 0.200                       | 0.078            | -0.0902                             | 1.158              | 0.124           | 0.200                       | 0.019                               | -0.0383            | 2.011           | 0.030            | 0.200                               | 0.029              | -0.0273         | 0.946            | 0.046                               | 0.200                      | 0.328           | -0.1544          | 0.471                               | 0.524              |
| 0.250                        | -0.054          | -0.008           | -0.014                              | -0.080             | 0.250                       | 0.082            | -0.0984                             | 1.195              | 0.123           | 0.250                       | 0.025                               | -0.0474            | 1.891           | 0.037            | 0.250                               | 0.039              | -0.0355         | 0.906            | 0.058                               | 0.250                      | 0.372           | -0.1715          | 0.461                               | 0.558              |
| 0.300                        | -0.071          | 0.065            | 0.091                               | -0.099             | 0.300                       | 0.109            | -0.1034                             | 0.948              | 0.101           | 0.300                       | 0.039                               | -0.0563            | 1.433           | 0.055            | 0.300                               | 0.057              | -0.0391         | 0.684            | 0.079                               | 0.300                      | 0.403           | -0.1855          | 0.461                               | 0.563              |
| 0.400                        | 0.004           | -0.0058          | 1.475                               | 0.004              | 0.400                       | 0.246            | -0.1234                             | 0.501              | 0.295           | 0.400                       | 0.157                               | -0.0743            | 0.474           | 0.188            | 0.400                               | 0.122              | -0.0530         | 0.435            | 0.146                               | 0.400                      | 0.413           | -0.1897          | 0.459                               | 0.495              |
| 0.600                        | 0.001           | 0.016            | -1.754                              | 0.000              | 0.600                       | 0.319            | -0.1132                             | 0.354              | 0.255           | 0.600                       | 0.196                               | -0.0686            | 0.350           | 0.156            | 0.600                               | 0.162              | -0.0594         | 0.366            | 0.129                               | 0.600                      | 0.443           | -0.2086          | 0.471                               | 0.354              |
| 0.800                        | 0.022           | -0.093           | 0.413                               | 0.008              | 0.800                       | 0.605            | -0.2588                             | 0.428              | 0.242           | 0.800                       | 0.356                               | -0.1426            | 0.401           | 0.142            | 0.800                               | 0.243              | -0.1089         | 0.448            | 0.097                               | 0.800                      | 0.484           | -0.2326          | 0.480                               | 0.193              |
| 1.000                        | 0.000           | 0.000            | 0.000                               | 0.000              | 1.000                       | 0.000            | 0.000                               | 0.000              | 0.000           | 1.000                       | 0.000                               | 0.000              | 0.000           | 0.000            | 1.000                               | 0.000              | 0.000           | 0.000            | 0.000                               | 1.000                      | 0.000           | 0.000            | 0.000                               | 0.000              |
| M = 0.701 $\alpha = 03.68$   |                 |                  |                                     |                    | M = 1.004 $\alpha = 03.93$  |                  |                                     |                    |                 | M = 1.303 $\alpha = 07.81$  |                                     |                    |                 |                  | M = 2.235 $\alpha = -03.73$         |                    |                 |                  |                                     |                            |                 |                  |                                     |                    |
| 0.175                        | 0.055           | -0.062           | 0.847                               | 0.090              | 0.175                       | 0.074            | -0.0758                             | 1.018              | 0.123           | 0.175                       | 0.192                               | -0.1142            | 0.595           | 0.317            | 0.175                               | -0.093             | 0.423           | 0.453            | -0.154                              |                            |                 |                  |                                     |                    |
| 0.200                        | 0.034           | -0.0449          | 1.337                               | 0.053              | 0.200                       | 0.067            | -0.0801                             | 1.188              | 0.107           | 0.200                       | 0.206                               | -0.1172            | 0.568           | 0.330            | 0.200                               | -0.089             | 0.369           | 0.415            | -0.142                              |                            |                 |                  |                                     |                    |
| 0.250                        | 0.030           | -0.0472          | 1.594                               | 0.044              | 0.250                       | 0.073            | -0.0883                             | 1.208              | 0.109           | 0.250                       | 0.234                               | -0.1234            | 0.527           | 0.351            | 0.250                               | -0.085             | 0.320           | 0.378            | -0.127                              |                            |                 |                  |                                     |                    |
| 0.300                        | 0.075           | -0.0561          | 0.745                               | 0.105              | 0.300                       | 0.105            | -0.0963                             | 0.920              | 0.146           | 0.300                       | 0.263                               | -0.1304            | 0.497           | 0.367            | 0.300                               | -0.086             | 0.347           | 0.403            | -0.120                              |                            |                 |                  |                                     |                    |
| 0.400                        | 0.205           | -0.0759          | 0.371                               | 0.245              | 0.400                       | 0.233            | -0.1159                             | 0.497              | 0.279           | 0.400                       | 0.304                               | -0.1345            | 0.442           | 0.365            | 0.400                               | -0.093             | 0.383           | 0.410            | -0.112                              |                            |                 |                  |                                     |                    |
| 0.600                        | 0.234           | -0.0594          | 0.254                               | 0.187              | 0.600                       | 0.288            | -0.0997                             | 0.347              | 0.230           | 0.600                       | 0.494                               | -0.2085            | 0.422           | 0.395            | 0.600                               | -0.119             | 0.527           | 0.442            | -0.095                              |                            |                 |                  |                                     |                    |
| 0.800                        | 0.431           | -0.1582          | 0.367                               | 0.172              | 0.800                       | 0.558            | -0.2342                             | 0.420              | 0.223           | 0.800                       | 0.644                               | -0.3205            | 0.497           | 0.257            | 0.800                               | -0.129             | 0.581           | 0.450            | -0.051                              |                            |                 |                  |                                     |                    |
| 1.000                        | 0.000           | 0.000            | 0.000                               | 0.000              | 1.000                       | 0.000            | 0.000                               | 0.000              | 0.000           | 1.000                       | 0.000                               | 0.000              | 0.000           | 0.000            | 1.000                               | 0.000              | 0.000           | 0.000            | 0.000                               |                            |                 |                  |                                     |                    |
| M = 0.699 $\alpha = 07.71$   |                 |                  |                                     |                    | M = 1.050 $\alpha = 03.93$  |                  |                                     |                    |                 | M = 1.300 $\alpha = 11.89$  |                                     |                    |                 |                  | M = 2.230 $\alpha = 00.20$          |                    |                 |                  |                                     |                            |                 |                  |                                     |                    |
| 0.175                        | 0.190           | -0.0846          | 0.445                               | 0.314              | 0.175                       | 0.045            | -0.0551                             | 1.233              | 0.073           | 0.175                       | 0.348                               | -0.1761            | 0.507           | 0.574            | 0.175                               | -0.045             | 0.168           | 0.369            | -0.075                              |                            |                 |                  |                                     |                    |
| 0.200                        | 0.205           | -0.0862          | 0.420                               | 0.328              | 0.200                       | 0.046            | -0.0625                             | 1.372              | 0.072           | 0.200                       | 0.360                               | -0.1771            | 0.492           | 0.576            | 0.200                               | -0.038             | 0.095           | 0.253            | -0.060                              |                            |                 |                  |                                     |                    |
| 0.250                        | 0.258           | -0.1008          | 0.391                               | 0.386              | 0.250                       | 0.057            | -0.0738                             | 1.295              | 0.085           | 0.250                       | 0.390                               | -0.1841            | 0.472           | 0.585            | 0.250                               | -0.029             | 0.022           | 0.076            | -0.043                              |                            |                 |                  |                                     |                    |
| 0.300                        | 0.340           | -0.1304          | 0.383                               | 0.476              | 0.300                       | 0.082            | -0.0805                             | 0.984              | 0.114           | 0.300                       | 0.427                               | -0.1976            | 0.462           | 0.598            | 0.300                               | -0.029             | 0.0040          | 0.137            | -0.041                              |                            |                 |                  |                                     |                    |
| 0.400                        | 0.373           | -0.1181          | 0.317                               | 0.447              | 0.400                       | 0.211            | -0.1027                             | 0.486              | 0.253           | 0.400                       | 0.493                               | -0.2063            | 0.418           | 0.591            | 0.400                               | 0.003              | -0.0019         | 0.577            | 0.003                               |                            |                 |                  |                                     |                    |
| 0.600                        | 0.565           | -0.1996          | 0.353                               | 0.452              | 0.600                       | 0.260            | -0.0940                             | 0.362              | 0.208           | 0.600                       | 0.787                               | -0.3836            | 0.487           | 0.629            | 0.600                               | 0.007              | -0.022          | 0.330            | 0.005                               |                            |                 |                  |                                     |                    |
| 0.800                        | 0.701           | -0.3072          | 0.438                               | 0.280              | 0.800                       | 0.489            | -0.1943                             | 0.397              | 0.195           | 0.800                       | 0.814                               | -0.3994            | 0.490           | 0.325            | 0.800                               | 0.032              | -0.146          | 0.449            | 0.012                               |                            |                 |                  |                                     |                    |
| 1.000                        | 0.000           | 0.000            | 0.000                               | 0.000              | 1.000                       | 0.000            | 0.000                               | 0.000              | 0.000           | 1.000                       | 0.000                               | 0.000              | 0.000           | 0.000            | 1.000                               | 0.000              | 0.000           | 0.000            | 0.000                               |                            |                 |                  |                                     |                    |
| M = 0.700 $\alpha = 11.74$   |                 |                  |                                     |                    | M = 1.099 $\alpha = 03.93$  |                  |                                     |                    |                 | M = 1.299 $\alpha = 15.72$  |                                     |                    |                 |                  | M = 2.231 $\alpha = 04.18$          |                    |                 |                  |                                     |                            |                 |                  |                                     |                    |
| 0.175                        | 0.401           | -0.1591          | 0.397                               | 0.662              | 0.175                       | 0.051            | -0.0552                             | 1.081              | 0.084           | 0.175                       | 0.520                               | -0.2523            | 0.485           | 0.859            | 0.175                               | 0.022              | -0.0147         | 0.681            | 0.035                               |                            |                 |                  |                                     |                    |
| 0.200                        | 0.400           | -0.1579          | 0.395                               | 0.639              | 0.200                       | 0.042            | -0.0590                             | 1.409              | 0.066           | 0.200                       | 0.525                               | -0.2459            | 0.468           | 0.840            | 0.200                               | 0.031              | -0.0268         | 0.731            | 0.049                               |                            |                 |                  |                                     |                    |
| 0.250                        | 0.420           | -0.1593          | 0.380                               | 0.629              | 0.250                       | 0.045            | -0.0668                             | 1.493              | 0.067           | 0.250                       | 0.552                               | -0.2459            | 0.446           | 0.827            | 0.250                               | 0.050              | -0.0351         | 0.700            | 0.075                               |                            |                 |                  |                                     |                    |
| 0.300                        | 0.470           | -0.1659          | 0.353                               | 0.657              | 0.300                       | 0.076            | -0.0752                             | 0.995              | 0.105           | 0.300                       | 0.601                               | -0.2626            | 0.437           | 0.841            | 0.300                               | 0.069              | -0.0426         | 0.617            | 0.096                               |                            |                 |                  |                                     |                    |
| 0.400                        | 0.541           | -0.1515          | 0.280                               | 0.648              | 0.400                       | 0.193            | -0.0907                             | 0.466              | 0.240           | 0.400                       | 0.679                               | -0.2828            | 0.417           | 0.814            | 0.400                               | 0.107              | -0.0458         | 0.427            | 0.128                               |                            |                 |                  |                                     |                    |
| 0.600                        | 0.864           | -0.3056          | 0.354                               | 0.691              | 0.600                       | 0.240            | -0.0729                             | 0.304              | 0.191           | 0.600                       | 0.898                               | -0.4378            | 0.488           | 0.718            | 0.600                               | 0.145              | -0.0579         | 0.399            | 0.116                               |                            |                 |                  |                                     |                    |
| 0.800                        | 0.912           | -0.3925          | 0.430                               | 0.364              | 0.800                       | 0.481            | -0.1980                             | 0.412              | 0.192           | 0.800                       | 0.854                               | -0.4415            | 0.517           | 0.341            | 0.800                               | 0.192              | -0.0863         | 0.450            | 0.076                               |                            |                 |                  |                                     |                    |
| 1.000                        | 0.000           | 0.000            | 0.000                               | 0.000              | 1.000                       | 0.000            | 0.000                               | 0.000              | 0.000           | 1.000                       | 0.000                               | 0.000              | 0.000           | 0.000            | 1.000                               | 0.000              | 0.000           | 0.000            | 0.000                               |                            |                 |                  |                                     |                    |
| M = 0.699 $\alpha = 15.76$   |                 |                  |                                     |                    | M = 1.300 $\alpha = -04.08$ |                  |                                     |                    |                 | M = 1.503 $\alpha = 03.78$  |                                     |                    |                 |                  | M = 2.236 $\alpha = 08.26$          |                    |                 |                  |                                     |                            |                 |                  |                                     |                    |
| 0.175                        | 0.583           | -0.2105          | 0.361                               | 0.963              | 0.175                       | -0.163           | 0.732                               | 0.450              | -0.268          | 0.175                       | 0.027                               | -0.0360            | 1.320           | 0.045            | 0.175                               | 0.124              | -0.0578         | 0.467            | 0.204                               |                            |                 |                  |                                     |                    |
| 0.200                        | 0.597           | -0.2125          | 0.356                               | 0.955              | 0.200                       | -0.164           | 0.719                               | 0.439              | -0.261          | 0.200                       | 0.023                               | -0.0383            | 1.640           | 0.037            | 0.200                               | 0.139              | -0.0657         | 0.474            | 0.221                               |                            |                 |                  |                                     |                    |
| 0.250                        | 0.636           | -0.2155          | 0.339                               | 0.954              | 0.250                       | -0.172           | 0.723                               | 0.422              | -0.257          | 0.250                       | 0.023                               | -0.0419            | 1.791           | 0.035            | 0.250                               | 0.163              | -0.0769         | 0.470            | 0.245                               |                            |                 |                  |                                     |                    |
| 0.300                        | 0.689           | -0.2176          | 0.316                               | 0.964              | 0.300                       | -0.187           | 0.767                               | 0.410              | -0.261          | 0.300                       | 0.034                               | -0.0447            | 1.317           | 0.037            | 0.300                               | 0.181              | -0.0821         | 0.453            | 0.248                               |                            |                 |                  |                                     |                    |
| 0.400                        | 0.776           | -0.2117          | 0.273                               | 0.931              | 0.400                       | -0.202           | 0.808                               | 0.400              | -0.242          | 0.400                       | 0.143                               | -0.0648            | 0.454           | 0.171            | 0.400                               | 0.213              | -0.0898         | 0.422            | 0.259                               |                            |                 |                  |                                     |                    |
| 0.600                        | 1.177           | -0.5882          | 0.469                               | 0.941              | 0.600                       |                  |                                     |                    |                 |                             |                                     |                    |                 |                  |                                     |                    |                 |                  |                                     |                            |                 |                  |                                     |                    |



TABLE IX.- SECTION COEFFICIENTS FOR THE WING WITH THE MODEL AT 0° SIDESLIP. VALUES FOR  $2y/b$  OF 0.175 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Concluded

(d) BW

| 2y/b                     | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{ov}}$ | C <sub>N<sub>W</sub></sub> | 2y/b  | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{ov}}$       | C <sub>N<sub>W</sub></sub> | 2y/b    | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{ov}}$ | C <sub>N<sub>W</sub></sub> | 2y/b   | C <sub>N<sub>W</sub></sub> | C <sub>m<sub>LE</sub></sub> | ( $\frac{X_{cp}}{c}$ ) <sub>W</sub> | $\frac{c}{C_{ov}}$ | C <sub>N<sub>W</sub></sub> |       |
|--------------------------|----------------------------|-----------------------------|-------------------------------------|--------------------|----------------------------|-------|----------------------------|-----------------------------|-------------------------------------|--------------------------|----------------------------|---------|----------------------------|-----------------------------|-------------------------------------|--------------------|----------------------------|--------|----------------------------|-----------------------------|-------------------------------------|--------------------|----------------------------|-------|
| M = 0.698    α = -0.442  |                            |                             |                                     |                    | M = 0.903    α = 0.3.78    |       |                            |                             |                                     | M = 1.299    α = -0.4.18 |                            |         |                            |                             | M = 1.500    α = 0.3.78             |                    |                            |        |                            | M = 2.234    α = 0.8.26     |                                     |                    |                            |       |
| 0.175                    | -0.149                     | 0.0526                      | 0.354                               | -0.245             | 0.175                      | 0.175 | -0.0681                    | 0.390                       | 0.288                               | 0.175                    | -0.129                     | 0.0567  | 0.440                      | -0.213                      | 0.175                               | 0.131              | -0.0584                    | 0.446  | 0.216                      | 0.175                       | 0.182                               | -0.0736            | 0.403                      | 0.301 |
| 0.200                    | -0.145                     | 0.0503                      | 0.346                               | -0.232             | 0.200                      | 0.181 | -0.0693                    | 0.382                       | 0.290                               | 0.200                    | -0.135                     | 0.0585  | 0.434                      | -0.215                      | 0.200                               | 0.133              | -0.0589                    | 0.444  | 0.212                      | 0.200                       | 0.190                               | -0.0776            | 0.408                      | 0.304 |
| 0.250                    | -0.153                     | 0.0501                      | 0.328                               | -0.228             | 0.250                      | 0.195 | -0.0709                    | 0.363                       | 0.292                               | 0.250                    | -0.145                     | 0.0616  | 0.424                      | -0.217                      | 0.250                               | 0.139              | -0.0601                    | 0.431  | 0.209                      | 0.250                       | 0.209                               | -0.0862            | 0.414                      | 0.312 |
| 0.300                    | -0.178                     | 0.0556                      | 0.313                               | -0.248             | 0.300                      | 0.210 | -0.0716                    | 0.341                       | 0.293                               | 0.300                    | -0.155                     | 0.0639  | 0.413                      | -0.216                      | 0.300                               | 0.151              | -0.0617                    | 0.409  | 0.211                      | 0.300                       | 0.230                               | -0.0958            | 0.417                      | 0.321 |
| 0.400                    | -0.202                     | 0.0672                      | 0.332                               | -0.242             | 0.400                      | 0.240 | -0.0808                    | 0.336                       | 0.288                               | 0.400                    | -0.184                     | 0.0754  | 0.411                      | -0.220                      | 0.400                               | 0.166              | -0.0657                    | 0.395  | 0.199                      | 0.400                       | 0.259                               | -1.131             | 0.437                      | 0.310 |
| 0.600                    | -0.265                     | 0.0734                      | 0.277                               | -0.211             | 0.600                      | 0.333 | -0.0954                    | 0.287                       | 0.266                               | 0.600                    | -0.257                     | 0.0998  | 0.389                      | -0.205                      | 0.600                               | 0.216              | -0.0805                    | 0.373  | 0.172                      | 0.600                       | 0.281                               | -1.263             | 0.449                      | 0.225 |
| 0.800                    | -0.441                     | 0.1546                      | 0.351                               | -0.176             | 0.800                      | 0.603 | -0.2603                    | 0.432                       | 0.241                               | 0.800                    | -0.395                     | 0.1587  | 0.402                      | -0.158                      | 0.800                               | 0.335              | -0.1305                    | 0.389  | 0.134                      | 0.800                       | 0.322                               | -1.492             | 0.464                      | 0.128 |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000              | 1.000                      | 0.000 | 0.0000                     | 0.000                       | 0.000                               | 1.000                    | 0.000                      | 0.0000  | 0.000                      | 0.000                       | 1.000                               | 0.000              | 0.0000                     | 0.000  | 0.000                      | 1.000                       | 0.000                               | 0.0000             | 0.000                      | 0.000 |
| M = 0.700    α = -0.0.06 |                            |                             |                                     |                    | M = 0.957    α = 0.3.88    |       |                            |                             |                                     | M = 1.304    α = -0.0.10 |                            |         |                            |                             | M = 1.703    α = 0.3.73             |                    |                            |        |                            | M = 2.232    α = 12.24      |                                     |                    |                            |       |
| 0.175                    | 0.015                      | -0.0045                     | 0.308                               | 0.024              | 0.175                      | 0.205 | -0.0959                    | 0.468                       | 0.338                               | 0.175                    | -0.001                     | 0.0015  | 2.864                      | -0.000                      | 0.175                               | 0.116              | -0.0508                    | 0.438  | 0.191                      | 0.175                       | 0.266                               | -1.121             | 0.421                      | 0.439 |
| 0.200                    | 0.015                      | -0.0046                     | 0.308                               | 0.023              | 0.200                      | 0.211 | -0.0977                    | 0.463                       | 0.337                               | 0.200                    | 0.003                      | -0.0004 | 0.161                      | 0.004                       | 0.200                               | 0.119              | -0.0513                    | 0.433  | 0.189                      | 0.200                       | 0.277                               | -1.183             | 0.427                      | 0.443 |
| 0.250                    | 0.016                      | -0.0053                     | 0.320                               | 0.024              | 0.250                      | 0.226 | -0.1018                    | 0.451                       | 0.338                               | 0.250                    | 0.006                      | -0.0026 | 0.409                      | 0.009                       | 0.250                               | 0.127              | -0.0537                    | 0.424  | 0.189                      | 0.250                       | 0.301                               | -1.313             | 0.436                      | 0.451 |
| 0.300                    | 0.019                      | -0.0065                     | 0.339                               | 0.026              | 0.300                      | 0.244 | -0.1068                    | 0.437                       | 0.342                               | 0.300                    | 0.006                      | -0.0025 | 0.389                      | 0.008                       | 0.300                               | 0.139              | -0.0579                    | 0.417  | 0.194                      | 0.300                       | 0.327                               | -1.454             | 0.445                      | 0.457 |
| 0.400                    | 0.021                      | -0.0034                     | 0.163                               | 0.016              | 0.400                      | 0.272 | -0.1134                    | 0.417                       | 0.326                               | 0.400                    | 0.004                      | 0.0000  | -0.0008                    | 0.005                       | 0.400                               | 0.152              | -0.0595                    | 0.392  | 0.182                      | 0.400                       | 0.347                               | -1.598             | 0.460                      | 0.416 |
| 0.600                    | 0.046                      | -0.0168                     | 0.367                               | 0.018              | 0.600                      | 0.675 | -0.3168                    | 0.469                       | 0.270                               | 0.800                    | 0.011                      | -0.0028 | 0.258                      | 0.004                       | 0.800                               | 0.300              | -0.1291                    | 0.431  | 0.119                      | 0.800                       | 0.399                               | -1.878             | 0.471                      | 0.159 |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000              | 1.000                      | 0.000 | 0.0000                     | 0.000                       | 0.000                               | 1.000                    | 0.000                      | 0.0000  | 0.000                      | 0.000                       | 1.000                               | 0.000              | 0.0000                     | 0.000  | 0.000                      | 1.000                       | 0.000                               | 0.0000             | 0.000                      | 0.000 |
| M = 0.699    α = 0.3.83  |                            |                             |                                     |                    | M = 1.008    α = -0.0.05   |       |                            |                             |                                     | M = 1.303    α = 0.3.83  |                            |         |                            |                             | M = 1.906    α = 0.3.93             |                    |                            |        |                            | M = 2.232    α = 16.22      |                                     |                    |                            |       |
| 0.175                    | 0.165                      | -0.0587                     | 0.355                               | 0.272              | 0.175                      | 0.025 | -0.0129                    | 0.524                       | 0.040                               | 0.175                    | 0.147                      | -0.0659 | 0.448                      | 0.242                       | 0.175                               | 0.105              | -0.0423                    | 0.401  | 0.174                      | 0.175                       | 0.370                               | -1.638             | 0.443                      | 0.610 |
| 0.200                    | 0.166                      | -0.0570                     | 0.343                               | 0.265              | 0.200                      | 0.024 | -0.0122                    | 0.512                       | 0.038                               | 0.200                    | 0.150                      | -0.0672 | 0.448                      | 0.239                       | 0.200                               | 0.108              | -0.0439                    | 0.404  | 0.173                      | 0.200                       | 0.383                               | -1.708             | 0.446                      | 0.613 |
| 0.250                    | 0.176                      | -0.0573                     | 0.326                               | 0.263              | 0.250                      | 0.025 | -0.0128                    | 0.509                       | 0.037                               | 0.250                    | 0.160                      | -0.0698 | 0.437                      | 0.239                       | 0.250                               | 0.118              | -0.0479                    | 0.405  | 0.177                      | 0.250                       | 0.409                               | -1.852             | 0.452                      | 0.614 |
| 0.300                    | 0.196                      | -0.0625                     | 0.319                               | 0.274              | 0.300                      | 0.030 | -0.0159                    | 0.528                       | 0.047                               | 0.300                    | 0.174                      | -0.0727 | 0.431                      | 0.243                       | 0.300                               | 0.123              | -0.0531                    | 0.398  | 0.176                      | 0.300                       | 0.436                               | -2.006             | 0.461                      | 0.609 |
| 0.400                    | 0.212                      | -0.0635                     | 0.300                               | 0.256              | 0.400                      | 0.032 | -0.0153                    | 0.472                       | 0.038                               | 0.400                    | 0.188                      | -0.0741 | 0.394                      | 0.225                       | 0.400                               | 0.145              | -0.0557                    | 0.383  | 0.174                      | 0.400                       | 0.453                               | -2.120             | 0.468                      | 0.544 |
| 0.600                    | 0.283                      | -0.0688                     | 0.243                               | 0.226              | 0.600                      | 0.034 | -0.0127                    | 0.379                       | 0.026                               | 0.600                    | 0.253                      | -0.0913 | 0.361                      | 0.202                       | 0.600                               | 0.177              | -0.0674                    | 0.381  | 0.141                      | 0.600                       | 0.463                               | -2.173             | 0.470                      | 0.370 |
| 0.800                    | 0.507                      | -0.2040                     | 0.403                               | 0.202              | 0.800                      | 0.056 | -0.0207                    | 0.371                       | 0.022                               | 0.800                    | 0.434                      | -0.1879 | 0.433                      | 0.173                       | 0.800                               | 0.253              | -0.1147                    | 0.454  | 0.101                      | 0.800                       | 0.497                               | -2.373             | 0.477                      | 0.198 |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000              | 1.000                      | 0.000 | 0.0000                     | 0.000                       | 0.000                               | 1.000                    | 0.000                      | 0.0000  | 0.000                      | 0.000                       | 1.000                               | 0.000              | 0.0000                     | 0.000  | 0.000                      | 1.000                       | 0.000                               | 0.0000             | 0.000                      | 0.000 |
| M = 0.700    α = 0.7.76  |                            |                             |                                     |                    | M = 1.002    α = 0.3.88    |       |                            |                             |                                     | M = 1.301    α = 0.7.81  |                            |         |                            |                             | M = 2.229    α = -0.3.88            |                    |                            |        |                            |                             |                                     |                    |                            |       |
| 0.175                    | 0.334                      | -1.1147                     | 0.343                               | 0.552              | 0.175                      | 0.190 | -0.0886                    | 0.467                       | 0.313                               | 0.175                    | 0.310                      | -1.1408 | 0.455                      | 0.511                       | 0.175                               | -0.0087            | 0.0425                     | 0.490  | -0.143                     |                             |                                     |                    |                            |       |
| 0.200                    | 0.339                      | -1.1129                     | 0.333                               | 0.542              | 0.200                      | 0.195 | -0.0897                    | 0.460                       | 0.311                               | 0.200                    | 0.315                      | -1.1425 | 0.452                      | 0.504                       | 0.200                               | -0.0082            | 0.0374                     | 0.456  | -0.131                     |                             |                                     |                    |                            |       |
| 0.250                    | 0.360                      | -1.1134                     | 0.315                               | 0.540              | 0.250                      | 0.206 | -0.0920                    | 0.446                       | 0.309                               | 0.250                    | 0.332                      | -1.1458 | 0.439                      | 0.498                       | 0.250                               | -0.0077            | 0.0316                     | 0.412  | -0.115                     |                             |                                     |                    |                            |       |
| 0.300                    | 0.398                      | -1.1190                     | 0.299                               | 0.557              | 0.300                      | 0.219 | -0.0945                    | 0.431                       | 0.306                               | 0.300                    | 0.356                      | -1.1488 | 0.418                      | 0.498                       | 0.300                               | -0.0077            | 0.0316                     | 0.410  | -0.107                     |                             |                                     |                    |                            |       |
| 0.400                    | 0.464                      | -1.232                      | 0.265                               | 0.557              | 0.400                      | 0.252 | -0.1041                    | 0.413                       | 0.302                               | 0.400                    | 0.402                      | -1.1563 | 0.389                      | 0.482                       | 0.400                               | -0.0092            | 0.0375                     | 0.409  | -0.110                     |                             |                                     |                    |                            |       |
| 0.600                    | 0.681                      | -2.175                      | 0.319                               | 0.544              | 0.600                      | 0.325 | -0.1169                    | 0.360                       | 0.260                               | 0.600                    | 0.570                      | -2.2402 | 0.421                      | 0.456                       | 0.600                               | -0.123             | 0.0512                     | 0.417  | -0.098                     |                             |                                     |                    |                            |       |
| 0.800                    | 0.700                      | -3.230                      | 0.461                               | 0.280              | 0.800                      | 0.614 | -0.2861                    | 0.466                       | 0.245                               | 0.800                    | 0.678                      | -3.316  | 0.489                      | 0.271                       | 0.800                               | -0.147             | 0.0662                     | 0.450  | -0.058                     |                             |                                     |                    |                            |       |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000              | 1.000                      | 0.000 | 0.0000                     | 0.000                       | 0.000                               | 1.000                    | 0.000                      | 0.0000  | 0.000                      | 0.000                       | 1.000                               | 0.000              | 0.0000                     | 0.000  | 0.000                      |                             |                                     |                    |                            |       |
| M = 0.696    α = 11.79   |                            |                             |                                     |                    | M = 1.062    α = 0.3.93    |       |                            |                             |                                     | M = 1.301    α = 11.84   |                            |         |                            |                             | M = 2.226    α = 0.0.25             |                    |                            |        |                            |                             |                                     |                    |                            |       |
| 0.175                    | 0.512                      | -1.702                      | 0.332                               | 0.846              | 0.175                      | 0.176 | -0.0786                    | 0.445                       | 0.291                               | 0.175                    | 0.458                      | -2.2028 | 0.443                      | 0.756                       | 0.175                               | -0.001             | 0.0056                     | 5.492  | -0.001                     |                             |                                     |                    |                            |       |
| 0.200                    | 0.534                      | -1.708                      | 0.320                               | 0.854              | 0.200                      | 0.181 | -0.0799                    | 0.441                       | 0.289                               | 0.200                    | 0.471                      | -2.075  | 0.441                      | 0.753                       | 0.200                               | 0.007              | 0.0001                     | -0.021 | 0.010                      |                             |                                     |                    |                            |       |
| 0.250                    | 0.583                      | -1.754                      | 0.301                               | 0.873              | 0.250                      | 0.192 | -0.0825                    | 0.429                       | 0.288                               | 0.250                    | 0.506                      | -2.170  | 0.429                      | 0.758                       | 0.250                               | 0.017              | -0.0067                    | 0.396  | 0.025                      |                             |                                     |                    |                            |       |
| 0.300                    | 0.638                      | -1.846                      | 0.290                               | 0.892              | 0.300                      | 0.205 | -0.0851                    | 0.414                       | 0.287                               | 0.300                    | 0.551                      | -2.267  | 0.411                      | 0.771                       | 0.300                               | 0.032              | -0.0085                    | 0.396  | 0.030                      |                             |                                     |                    |                            |       |
| 0.400                    | 0.770                      | -2.130                      | 0.277                               | 0.923              | 0.400                      | 0.232 | -0.0916                    | 0.395                       | 0.278                               | 0.400                    | 0.632                      | -2.569  | 0.406                      | 0.758                       | 0.400                               | 0.020              | -0.0076                    | 0.382  | 0.023                      |                             |                                     |                    |                            |       |
| 0.600                    | 1.116                      | -4.749                      | 0.426                               | 0.892              | 0.600                      | 0.303 | -0.1060                    | 0.350                       | 0.242                               | 0.600                    | 0.845                      | -4.199  | 0.497                      | 0.675                       | 0.600                               | 0.020              | -0.0075                    | 0.375  | 0.015                      |                             |                                     |                    |                            |       |
| 0.800                    | 0.753                      | -3.152                      | 0.419                               | 0.301              | 0.800                      | 0.574 | -2.660                     | 0.463                       | 0.229                               | 0.800                    | 0.802                      | -3.842  | 0.479                      | 0.320                       | 0.800                               | 0.035              | -0.0166                    | 0.478  | 0.013                      |                             |                                     |                    |                            |       |
| 1.000                    | 0.000                      | 0.0000                      | 0.000                               | 0.000              | 1.000                      | 0.000 | 0.0000                     | 0.000                       | 0.000                               | 1.000                    | 0.000                      | 0.0000  | 0.000                      | 0.000                       | 1.000                               | 0.000              | 0.0000                     | 0.000  | 0.000                      |                             |                                     |                    |                            |       |
| M = 0.699    α = 15.67   |                            |                             |                                     |                    | M = 1.109    α = 0.3.93    |       |                            |                             |                                     | M = 1.300    α = 15.87   |                            |         |                            |                             | M = 2.229    α = 0.4.13             |                    |                            |        |                            |                             |                                     |                    |                            |       |
| 0.175                    | 0.721                      | -2.340                      | 0.325                               | 1.191              | 0.175                      | 0.180 | -0.0828                    | 0.459                       | 0.298                               | 0.175                    | 0.620                      | -2.745  | 0.443                      | 1.024                       | 0.175                               | 0.088              | -0.0325                    | 0.369  | 0.145                      |                             |                                     |                    |                            |       |
| 0.200                    | 0.763                      | -2.404                      | 0.315                               | 1.220              | 0.200                      | 0.182 | -0.0829                    | 0.456                       | 0.290                               | 0.200                    | 0.652                      | -2.858  | 0.438                      | 1.043                       | 0.200                               | 0.097              | -0.0379                    | 0.391  | 0.155                      |                             |                                     |                    |                            |       |
| 0.250                    | 0.854                      | -2.612                      | 0.306                               | 1.280              | 0.250                      | 0.192 | -0.0855                    | 0.446                       | 0.287                               | 0.250                    | 0.715                      | -3.081  | 0.431                      | 1.072                       | 0.250                               | 0.112              | -0.0457                    | 0.408  | 0.167                      |                             |                                     |                    |                            |       |
| 0.300                    | 0.955                      | -2.928                      | 0.306                               | 1.337              | 0.300                      | 0.212 | -0.0915                    | 0.431                       | 0.297                               | 0.300                    | 0.777                      | -3.312  | 0.425                      | 1.088                       | 0.300                               | 0.128              | -0.0497                    | 0.404  | 0.172                      |                             |                                     |                    |                            |       |
| 0.400                    | 1.117                      | -3.612                      | 0.323                               | 1.304              | 0.400                      | 0.238 | -0.0969                    | 0.409                       | 0.284                               | 0.400                    | 0.899                      | -4.023  | 0.448                      | 1.077                       | 0.400                               | 0.136              | -0.0545                    | 0.401  | 0.161                      |                             |                                     |                    |                            |       |
| 0.600                    | 1.306                      | -4.644                      | 0.343                               | 1.067              | 0.600                      | 0.302 | -0.1060                    | 0.351                       | 0.241                               | 0.600                    | 0.983                      | -4.886  | 0                          |                             |                                     |                    |                            |        |                            |                             |                                     |                    |                            |       |



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[illegible]



TABLE X.- SECTION COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT 0° SIDESLIP. VALUES FOR y/b OF 0.011 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued

(b) BVWC;  $\delta = -0.5^\circ$

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| y/b                          | $c_{YV}$ | $c_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{c}{c_{ov}}$ | $c_{YV}$ | y/b                        | $c_{YV}$ | $c_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{c}{c_{ov}}$ | $c_{YV}$ | y/b                         | $c_{YV}$ | $c_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{c}{c_{ov}}$ | $c_{YV}$ | y/b                         | $c_{YV}$ | $c_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{c}{c_{ov}}$ | $c_{YV}$ | y/b                        | $c_{YV}$ | $c_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{c}{c_{ov}}$ | $c_{YV}$ | y/b   | $c_{YV}$ | $c_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{c}{c_{ov}}$ | $c_{YV}$ |        |         |        |        |  |  |
|------------------------------|----------|-----------|-----------------------------------|--------------------|----------|----------------------------|----------|-----------|-----------------------------------|--------------------|----------|-----------------------------|----------|-----------|-----------------------------------|--------------------|----------|-----------------------------|----------|-----------|-----------------------------------|--------------------|----------|----------------------------|----------|-----------|-----------------------------------|--------------------|----------|-------|----------|-----------|-----------------------------------|--------------------|----------|--------|---------|--------|--------|--|--|
| M = 0.700 $\alpha = -0.4.28$ |          |           |                                   |                    |          | M = 0.905 $\alpha = 03.73$ |          |           |                                   |                    |          | M = 1.299 $\alpha = -00.20$ |          |           |                                   |                    |          | M = 1.698 $\alpha = 03.83$  |          |           |                                   |                    |          | M = 2.231 $\alpha = 12.24$ |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.011                        | -0.046   | .0156     | 0.342                             | -0.070             | 0.011    | 0.025                      | .0053    | -0.213    | 0.038                             | 0.011              | 0.047    | -0.0314                     | 0.671    | 0.072     | 0.011                             | -0.029             | .0416    | 1.440                       | -0.044   | 0.011     | -0.075                            | .0644              | 0.857    | -0.116                     | 0.011    | -0.075    | .0644                             | 0.857              | -0.116   | 0.011 | -0.075   | .0644     | 0.857                             | -0.116             | 0.011    | -0.075 | .0644   | 0.857  | -0.116 |  |  |
| 0.150                        | -0.034   | .0056     | 0.167                             | -0.046             | 0.150    | 0.072                      | -0.211   | 0.294     | 0.100                             | 0.150              | 0.062    | -0.036                      | 0.578    | 0.086     | 0.150                             | 0.034              | -0.066   | 0.194                       | 0.047    | 0.150     | 0.003                             | .0107              | -3.517   | 0.004                      | 0.150    | 0.003     | .0107                             | -3.517             | 0.004    | 0.150 | 0.003    | .0107     | -3.517                            | 0.004              | 0.150    | 0.003  | .0107   | -3.517 | 0.004  |  |  |
| 0.300                        | -0.029   | .0000     | 0.000                             | -0.036             | 0.300    | 0.102                      | -0.0329  | 0.321     | 0.125                             | 0.300              | 0.066    | -0.0339                     | 0.513    | 0.081     | 0.300                             | 0.068              | -0.0297  | 0.435                       | 0.083    | 0.300     | 0.043                             | -0.0138            | 0.317    | 0.053                      | 0.300    | 0.043     | -0.0138                           | 0.317              | 0.053    | 0.300 | 0.043    | -0.0138   | 0.317                             | 0.053              | 0.300    | 0.043  | -0.0138 | 0.317  | 0.053  |  |  |
| 0.450                        | -0.035   | -.0001    | -0.004                            | -0.036             | 0.450    | 0.112                      | -0.0274  | 0.244     | 0.118                             | 0.450              | 0.059    | -0.0258                     | 0.441    | 0.061     | 0.450                             | 0.068              | -0.0229  | 0.334                       | 0.072    | 0.450     | 0.038                             | -0.0034            | 0.091    | 0.040                      | 0.450    | 0.038     | -0.0034                           | 0.091              | 0.040    | 0.450 | 0.038    | -0.0034   | 0.091                             | 0.040              | 0.450    | 0.038  | -0.0034 | 0.091  | 0.040  |  |  |
| 0.600                        | -0.050   | .0131     | 0.261                             | -0.044             | 0.600    | 0.129                      | -0.0341  | 0.265     | 0.114                             | 0.600              | 0.059    | -0.0247                     | 0.416    | 0.052     | 0.600                             | 0.081              | -0.0300  | 0.370                       | 0.071    | 0.600     | 0.064                             | -0.0163            | 0.255    | 0.056                      | 0.600    | 0.064     | -0.0163                           | 0.255              | 0.056    | 0.600 | 0.064    | -0.0163   | 0.255                             | 0.056              | 0.600    | 0.064  | -0.0163 | 0.255  | 0.056  |  |  |
| 0.750                        | -0.049   | .0100     | 0.202                             | -0.035             | 0.750    | 0.137                      | -0.0329  | 0.240     | 0.098                             | 0.750              | 0.020    | -0.0098                     | 0.496    | 0.014     | 0.750                             | 0.078              | -0.0280  | 0.360                       | 0.055    | 0.750     | 0.060                             | -0.0117            | 0.196    | 0.042                      | 0.750    | 0.060     | -0.0117                           | 0.196              | 0.042    | 0.750 | 0.060    | -0.0117   | 0.196                             | 0.042              | 0.750    | 0.060  | -0.0117 | 0.196  | 0.042  |  |  |
| 1.000                        | 0.000    | .0000     | 0.000                             | 0.000              | 1.000    | 0.000                      | .0000    | 0.000     | 0.000                             | 1.000              | 0.000    | .0000                       | 0.000    | 0.000     | 1.000                             | 0.000              | .0000    | 0.000                       | 0.000    | 1.000     | 0.000                             | .0000              | 0.000    | 0.000                      | 1.000    | 0.000     | .0000                             | 0.000              | 0.000    | 1.000 | 0.000    | .0000     | 0.000                             | 0.000              | 1.000    | 0.000  | .0000   | 0.000  | 0.000  |  |  |
| M = 0.698 $\alpha = -00.15$  |          |           |                                   |                    |          | M = 0.955 $\alpha = 03.78$ |          |           |                                   |                    |          | M = 1.301 $\alpha = 03.69$  |          |           |                                   |                    |          | M = 1.893 $\alpha = 04.03$  |          |           |                                   |                    |          | M = 2.224 $\alpha = 16.22$ |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.011                        | 0.034    | -.0064    | 0.190                             | 0.052              | 0.011    | 0.019                      | .0205    | -1.064    | 0.029                             | 0.011              | 0.087    | -.0597                      | 0.689    | 0.133     | 0.011                             | -0.069             | .0723    | 1.055                       | -0.105   | 0.011     | -0.226                            | .1505              | 0.667    | -0.348                     | 0.011    | -0.226    | .1505                             | 0.667              | -0.348   | 0.011 | -0.226   | .1505     | 0.667                             | -0.348             | 0.011    | -0.226 | .1505   | 0.667  | -0.348 |  |  |
| 0.150                        | 0.046    | -.0149    | 0.325                             | 0.063              | 0.150    | 0.070                      | -.0151   | 0.215     | 0.098                             | 0.150              | 0.071    | -.0301                      | 0.423    | 0.099     | 0.150                             | 0.019              | .0015    | -0.082                      | 0.026    | 0.150     | -0.017                            | .0091              | 0.551    | -0.023                     | 0.150    | -0.017    | .0091                             | 0.551              | -0.023   | 0.150 | -0.017   | .0091     | 0.551                             | -0.023             | 0.150    | -0.017 | .0091   | 0.551  | -0.023 |  |  |
| 0.300                        | 0.051    | -.0191    | 0.353                             | 0.066              | 0.300    | 0.109                      | -.0342   | 0.315     | 0.133                             | 0.300              | 0.076    | -.0208                      | 0.274    | 0.092     | 0.300                             | 0.066              | -0.0343  | 0.520                       | 0.080    | 0.300     | 0.077                             | -0.0456            | 0.595    | 0.094                      | 0.300    | 0.077     | -0.0456                           | 0.595              | 0.094    | 0.300 | 0.077    | -0.0456   | 0.595                             | 0.094              | 0.300    | 0.077  | -0.0456 | 0.595  | 0.094  |  |  |
| 0.450                        | 0.058    | -.0182    | 0.315                             | 0.061              | 0.450    | 0.130                      | -.0333   | 0.256     | 0.137                             | 0.450              | 0.102    | -.0349                      | 0.341    | 0.108     | 0.450                             | 0.064              | -0.0280  | 0.437                       | 0.067    | 0.450     | 0.032                             | .0013              | -0.039   | 0.034                      | 0.450    | 0.032     | .0013                             | -0.039             | 0.034    | 0.450 | 0.032    | .0013     | -0.039                            | 0.034              | 0.450    | 0.032  | .0013   | -0.039 | 0.034  |  |  |
| 0.600                        | 0.051    | -.0151    | 0.295                             | 0.045              | 0.600    | 0.135                      | -.0272   | 0.202     | 0.119                             | 0.600              | 0.123    | -.0440                      | 0.357    | 0.109     | 0.600                             | 0.067              | -0.0266  | 0.399                       | 0.059    | 0.600     | 0.042                             | -0.0059            | 0.139    | 0.037                      | 0.600    | 0.042     | -0.0059                           | 0.139              | 0.037    | 0.600 | 0.042    | -0.0059   | 0.139                             | 0.037              | 0.600    | 0.042  | -0.0059 | 0.139  | 0.037  |  |  |
| 0.750                        | 0.038    | -.0067    | 0.177                             | 0.026              | 0.750    | 0.141                      | -.0306   | 0.218     | 0.100                             | 0.750              | 0.168    | -.0893                      | 0.531    | 0.120     | 0.750                             | 0.051              | -.0150   | 0.294                       | 0.036    | 0.750     | 0.016                             | .0118              | -0.731   | 0.011                      | 0.750    | 0.016     | .0118                             | -0.731             | 0.011    | 0.750 | 0.016    | .0118     | -0.731                            | 0.011              | 0.750    | 0.016  | .0118   | -0.731 | 0.011  |  |  |
| 1.000                        | 0.000    | .0000     | 0.000                             | 0.000              | 1.000    | 0.000                      | .0000    | 0.000     | 0.000                             | 1.000              | 0.000    | .0000                       | 0.000    | 0.000     | 1.000                             | 0.000              | .0000    | 0.000                       | 0.000    | 1.000     | 0.000                             | .0000              | 0.000    | 0.000                      | 1.000    | 0.000     | .0000                             | 0.000              | 0.000    | 1.000 | 0.000    | .0000     | 0.000                             | 0.000              | 1.000    | 0.000  | .0000   | 0.000  | 0.000  |  |  |
| M = 0.696 $\alpha = 03.68$   |          |           |                                   |                    |          | M = 1.005 $\alpha = 03.88$ |          |           |                                   |                    |          | M = 1.299 $\alpha = 07.76$  |          |           |                                   |                    |          | M = 2.234 $\alpha = -03.83$ |          |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.011                        | 0.029    | .0052     | -0.178                            | 0.045              | 0.011    | -0.253                     | .2712    | 1.072     | -0.390                            | 0.011              | -0.096   | .0683                       | 0.710    | -0.148    | 0.011                             | -0.050             | .0388    | 0.774                       | -0.077   |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.150                        | 0.064    | .0168     | 0.264                             | 0.089              | 0.150    | 0.098                      | -.0475   | 0.484     | 0.089                             | 0.150              | 0.004    | -.0034                      | 0.754    | 0.006     | 0.150                             | -0.001             | -.0014   | -2.392                      | -0.000   |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.300                        | 0.089    | -.0275    | 0.308                             | 0.109              | 0.300    | 0.245                      | -.1697   | 0.693     | 0.300                             | 0.300              | 0.061    | -.0320                      | 0.521    | 0.075     | 0.300                             | 0.018              | -.0171   | 0.962                       | 0.021    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.450                        | 0.103    | -.0246    | 0.238                             | 0.109              | 0.450    | 0.151                      | -.0618   | 0.409     | 0.159                             | 0.450              | 0.065    | -.0100                      | 0.155    | 0.068     | 0.450                             | -0.000             | -.0042   | 0.000                       | -0.000   |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.600                        | 0.105    | -.0208    | 0.198                             | 0.093              | 0.600    | 0.163                      | -.0529   | 0.324     | 0.144                             | 0.600              | 0.109    | -.0238                      | 0.219    | 0.096     | 0.600                             | 0.004              | -.0067   | 1.601                       | 0.003    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.750                        | 0.132    | -.0408    | 0.310                             | 0.094              | 0.750    | 0.161                      | -.0315   | 0.195     | 0.115                             | 0.750              | 0.230    | -.1238                      | 0.538    | 0.164     | 0.750                             | 0.015              | -.0108   | 0.725                       | 0.010    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 1.000                        | 0.000    | .0000     | 0.000                             | 0.000              | 1.000    | 0.000                      | .0000    | 0.000     | 0.000                             | 1.000              | 0.000    | .0000                       | 0.000    | 0.000     | 1.000                             | 0.000              | .0000    | 0.000                       | 0.000    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| M = 0.695 $\alpha = 07.85$   |          |           |                                   |                    |          | M = 1.044 $\alpha = 03.88$ |          |           |                                   |                    |          | M = 1.296 $\alpha = 11.79$  |          |           |                                   |                    |          | M = 2.233 $\alpha = 00.15$  |          |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.011                        | -0.049   | -.0108    | -0.220                            | -0.075             | 0.011    | 0.018                      | .0040    | -0.218    | 0.028                             | 0.011              | -0.548   | .1796                       | 0.328    | -0.846    | 0.011                             | -0.031             | .0345    | 1.100                       | -0.048   |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.150                        | -0.020   | -.0093    | -0.474                            | -0.027             | 0.150    | 0.099                      | -.0521   | 0.529     | 0.137                             | 0.150              | -0.238   | .0778                       | 0.327    | -0.333    | 0.150                             | 0.027              | -.0106   | 0.392                       | 0.037    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.300                        | 0.028    | -.0165    | 0.590                             | 0.034              | 0.300    | 0.164                      | -.0947   | 0.578     | 0.200                             | 0.300              | -0.041   | .0201                       | 0.487    | -0.050    | 0.300                             | 0.051              | -.0292   | 0.573                       | 0.062    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.450                        | 0.092    | -.0327    | 0.357                             | 0.096              | 0.450    | 0.207                      | -.1186   | 0.574     | 0.218                             | 0.450              | 0.013    | .0166                       | -1.328   | 0.013     | 0.450                             | 0.034              | -.0166   | 0.483                       | 0.036    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.600                        | 0.126    | -.0311    | 0.246                             | 0.112              | 0.600    | 0.111                      | -.0069   | 0.062     | 0.098                             | 0.600              | 0.104    | -.0328                      | 0.316    | 0.092     | 0.600                             | 0.035              | -.0180   | 0.511                       | 0.031    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.750                        | 0.144    | -.0310    | 0.216                             | 0.102              | 0.750    | 0.113                      | -.0088   | -0.078    | 0.080                             | 0.750              | 0.215    | -.1097                      | 0.510    | 0.153     | 0.750                             | 0.036              | -.0176   | 0.487                       | 0.025    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 1.000                        | 0.000    | .0000     | 0.000                             | 0.000              | 1.000    | 0.000                      | .0000    | 0.000     | 0.000                             | 1.000              | 0.000    | .0000                       | 0.000    | 0.000     | 1.000                             | 0.000              | .0000    | 0.000                       | 0.000    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| M = 0.700 $\alpha = 11.79$   |          |           |                                   |                    |          | M = 1.102 $\alpha = 03.93$ |          |           |                                   |                    |          | M = 1.299 $\alpha = 15.82$  |          |           |                                   |                    |          | M = 2.231 $\alpha = 04.18$  |          |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.011                        | -0.605   | .1340     | 0.222                             | -0.933             | 0.011    | -0.013                     | .0485    | 3.816     | -0.019                            | 0.011              | -0.802   | .6731                       | 0.590    | -1.239    | 0.011                             | -0.046             | .0453    | 0.977                       | -0.071   |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.150                        | -0.284   | .0441     | 0.155                             | -0.397             | 0.150    | 0.106                      | .0520    | 0.491     | 0.148                             | 0.150              | -0.427   | .2540                       | 0.595    | -0.597    | 0.150                             | 0.029              | -.0098   | 0.336                       | 0.040    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.300                        | -0.067   | -.0089    | -0.132                            | -0.082             | 0.300    | 0.175                      | .1020    | 0.583     | 0.214                             | 0.300              | -0.098   | .0442                       | 0.453    | -0.119    | 0.300                             | 0.064              | -.0337   | 0.524                       | 0.078    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.450                        | 0.017    | -.0162    | 0.981                             | 0.017              | 0.450    | 0.183                      | -.0914   | 0.499     | 0.193                             | 0.450              | 0.153    | -.1380                      | 0.905    | 0.161     | 0.450                             | 0.051              | -.0207   | 0.403                       | 0.054    |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |
| 0.6                          |          |           |                                   |                    |          |                            |          |           |                                   |                    |          |                             |          |           |                                   |                    |          |                             |          |           |                                   |                    |          |                            |          |           |                                   |                    |          |       |          |           |                                   |                    |          |        |         |        |        |  |  |



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| y/b                         | C <sub>YV</sub> | C <sub>NLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>V</sub> | $\frac{C}{C_{cov}}$ | C <sub>YV</sub>             | C <sub>NLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>V</sub> | $\frac{C}{C_{cov}}$ | y/b    | C <sub>YV</sub>             | C <sub>NLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>V</sub> | $\frac{C}{C_{cov}}$ | y/b    | C <sub>YV</sub>             | C <sub>NLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>V</sub> | $\frac{C}{C_{cov}}$ | y/b    | C <sub>YV</sub>            | C <sub>NLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>V</sub> | $\frac{C}{C_{cov}}$ | y/b    | C <sub>YV</sub> | C <sub>NLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>V</sub> | $\frac{C}{C_{cov}}$ |
|-----------------------------|-----------------|------------------|----------------------------------------|---------------------|-----------------------------|------------------|----------------------------------------|---------------------|--------|-----------------------------|------------------|----------------------------------------|---------------------|--------|-----------------------------|------------------|----------------------------------------|---------------------|--------|----------------------------|------------------|----------------------------------------|---------------------|--------|-----------------|------------------|----------------------------------------|---------------------|
| M = 0.697 $\alpha = -0.462$ |                 |                  |                                        |                     | M = 0.903 $\alpha = 0.378$  |                  |                                        |                     |        | M = 1.303 $\alpha = -0.010$ |                  |                                        |                     |        | M = 1.703 $\alpha = 0.373$  |                  |                                        |                     |        | M = 2.232 $\alpha = 12.24$ |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.011                       | -0.407          | .2129            | 0.524                                  | -0.627              | 0.011                       | -0.011           | .0145                                  | 1.258               | -0.017 | 0.011                       | 0.013            | -.0064                                 | 0.474               | 0.020  | 0.011                       | -0.063           | .0284                                  | 0.451               | -0.097 | 0.011                      | -0.114           | .0803                                  | 0.704               | -0.176 |                 |                  |                                        |                     |
| 0.150                       | -0.032          | .0040            | 0.123                                  | -0.045              | 0.150                       | 0.059            | -.0164                                 | 0.279               | 0.082  | 0.150                       | 0.038            | -.0148                                 | 0.392               | 0.052  | 0.150                       | -.0001           | .0016                                  | 2.318               | 0.000  | 0.150                      | -0.011           | .0107                                  | 0.944               | -0.016 |                 |                  |                                        |                     |
| 0.450                       | -0.025          | .0040            | -0.160                                 | -0.030              | 0.450                       | 0.103            | -.0314                                 | 0.304               | 0.126  | 0.300                       | 0.056            | -.0235                                 | 0.418               | 0.068  | 0.300                       | .0043            | -.0165                                 | .0384               | 0.052  | 0.300                      | .0042            | -.0197                                 | 0.468               | 0.051  |                 |                  |                                        |                     |
| 0.600                       | -0.116          | .0427            | 0.367                                  | -0.102              | 0.600                       | 0.115            | -.0278                                 | 0.238               | 0.121  | 0.450                       | 0.066            | -.0316                                 | 0.478               | 0.070  | 0.450                       | .0062            | -.0235                                 | .0378               | 0.068  | 0.450                      | .0036            | -.0035                                 | 0.098               | 0.037  |                 |                  |                                        |                     |
| 0.750                       | -0.097          | .0215            | .223                                   | -0.069              | 0.750                       | 0.124            | -.0274                                 | 0.220               | 0.110  | 0.600                       | 0.054            | -.0200                                 | 0.372               | 0.047  | 0.600                       | .0077            | -.0336                                 | .0436               | 0.068  | 0.600                      | .0066            | -.0209                                 | 0.319               | 0.058  |                 |                  |                                        |                     |
| 1.000                       | 0.000           | .0000            | 0.000                                  | 0.000               | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                      | 0.000            | .0000                                  | 0.000               | 0.000  |                 |                  |                                        |                     |
| M = 0.696 $\alpha = -0.006$ |                 |                  |                                        |                     | M = 0.951 $\alpha = 0.382$  |                  |                                        |                     |        | M = 1.304 $\alpha = 0.378$  |                  |                                        |                     |        | M = 1.909 $\alpha = 0.393$  |                  |                                        |                     |        | M = 2.232 $\alpha = 16.26$ |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.011                       | 0.019           | .0022            | -0.113                                 | 0.029               | 0.011                       | 0.032            | -.0106                                 | 0.327               | 0.050  | 0.011                       | -0.008           | -.0097                                 | -1.226              | -0.012 | 0.011                       | -0.041           | .0089                                  | 0.217               | -0.063 | 0.011                      | -0.301           | .1887                                  | 0.627               | -0.464 |                 |                  |                                        |                     |
| 0.150                       | 0.051           | .0125            | 0.335                                  | 0.070               | 0.150                       | 0.105            | -.0296                                 | 0.282               | 0.100  | 0.150                       | 0.026            | -.0063                                 | 0.413               | 0.036  | 0.150                       | .0036            | .0045                                  | 0.008               | 0.150  | -0.070                     | .0451            | 0.642                                  | -0.098              |        |                 |                  |                                        |                     |
| 0.300                       | 0.062           | .0221            | 0.357                                  | 0.075               | 0.300                       | 0.105            | -.0296                                 | 0.282               | 0.128  | 0.300                       | 0.057            | -.0083                                 | 0.146               | 0.069  | 0.300                       | .0041            | -.0164                                 | .0401               | 0.000  | 0.300                      | .0055            | -.0281                                 | 0.513               | 0.054  |                 |                  |                                        |                     |
| 0.450                       | 0.050           | -.0112           | 0.224                                  | 0.052               | 0.450                       | 0.128            | -.0242                                 | 0.189               | 0.135  | 0.450                       | 0.081            | -.0163                                 | 0.200               | 0.085  | 0.450                       | .0059            | -.0234                                 | .0399               | 0.062  | 0.450                      | .0051            | -.0165                                 | 0.025               | 0.057  |                 |                  |                                        |                     |
| 0.600                       | 0.055           | .0154            | .278                                   | 0.049               | 0.600                       | 0.136            | -.0227                                 | 0.167               | 0.120  | 0.600                       | 0.110            | -.0327                                 | 0.298               | 0.097  | 0.600                       | .0064            | -.0264                                 | .0415               | 0.056  | 0.600                      | .0028            | .0052                                  | -0.182              | 0.025  |                 |                  |                                        |                     |
| 0.750                       | 0.056           | -.0217           | 0.385                                  | 0.040               | 0.750                       | 0.139            | -.0261                                 | 0.188               | 0.099  | 0.750                       | 0.116            | -.0384                                 | 0.330               | 0.083  | 0.750                       | .0022            | -.0078                                 | -.0358              | 0.015  | 0.750                      | .0057            | -.0198                                 | 0.347               | 0.040  |                 |                  |                                        |                     |
| 1.000                       | 0.000           | .0000            | 0.000                                  | 0.000               | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                      | 0.000            | .0000                                  | 0.000               | 0.000  |                 |                  |                                        |                     |
| M = 0.701 $\alpha = 0.368$  |                 |                  |                                        |                     | M = 1.004 $\alpha = 0.393$  |                  |                                        |                     |        | M = 1.303 $\alpha = 0.781$  |                  |                                        |                     |        | M = 2.235 $\alpha = -0.373$ |                  |                                        |                     |        |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.011                       | -0.004          | -.0112           | -2.921                                 | -0.005              | 0.011                       | 0.009            | -.0109                                 | 1.215               | 0.013  | 0.011                       | -0.137           | .0368                                  | 0.268               | -0.211 | 0.011                       | -0.060           | .0477                                  | 0.793               | -0.092 |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.150                       | 0.045           | -.0203           | 0.449                                  | 0.063               | 0.150                       | 0.111            | -.0695                                 | 0.628               | 0.154  | 0.150                       | -0.112           | .0467                                  | 0.418               | -0.156 | 0.150                       | -0.010           | .0068                                  | 0.695               | -0.013 |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.300                       | 0.079           | -.0230           | 0.293                                  | 0.096               | 0.300                       | 0.159            | -.0829                                 | 0.523               | 0.194  | 0.300                       | -0.064           | .0425                                  | .0661               | -0.078 | 0.300                       | .0011            | -.0112                                 | .0992               | 0.013  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.450                       | 0.091           | -.0182           | 0.199                                  | 0.096               | 0.450                       | 0.142            | -.0446                                 | 0.314               | 0.150  | 0.450                       | 0.004            | .0227                                  | -.5891              | 0.004  | 0.450                       | -0.002           | -.0022                                 | -1.083              | -0.002 |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.600                       | 0.101           | -.0185           | 0.089                                  | 0.089               | 0.600                       | 0.145            | -.0308                                 | 0.213               | 0.128  | 0.600                       | 0.076            | .0165                                  | 0.063               | 0.128  | 0.600                       | .0002            | -.0126                                 | .0002               | -2.550 | -0.001                     |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.750                       | 0.111           | -.0231           | 0.208                                  | 0.079               | 0.750                       | 0.139            | -.0062                                 | 0.045               | 0.099  | 0.750                       | 0.112            | -.0169                                 | 0.000               | 0.000  | 0.750                       | .0000            | .0078                                  | 0.000               | 0.000  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 1.000                       | 0.000           | .0000            | 0.000                                  | 0.000               | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| M = 0.699 $\alpha = 0.771$  |                 |                  |                                        |                     | M = 1.050 $\alpha = 0.393$  |                  |                                        |                     |        | M = 1.300 $\alpha = 11.89$  |                  |                                        |                     |        | M = 2.230 $\alpha = 0.020$  |                  |                                        |                     |        |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.011                       | -0.703          | .1836            | 0.261                                  | -1.084              | 0.011                       | 0.016            | -.0320                                 | 1.971               | 0.025  | 0.011                       | -0.692           | .3395                                  | 0.490               | -1.069 | 0.011                       | -0.007           | .0062                                  | 0.894               | -0.010 |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.150                       | -0.091          | .0052            | 0.179                                  | -0.050              | 0.150                       | 0.090            | -.0645                                 | 0.719               | 0.125  | 0.150                       | -0.296           | .0413                                  | 0.228               | -0.413 | 0.150                       | .0025            | -.0090                                 | 0.360               | 0.034  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.300                       | -0.031          | -.0193           | -0.619                                 | -0.038              | 0.300                       | 0.128            | -.0698                                 | 0.545               | 0.157  | 0.300                       | -0.038           | .0097                                  | -.257               | -0.046 | 0.300                       | .0039            | -.0162                                 | .0418               | 0.047  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.450                       | -0.042          | .0186            | 0.446                                  | 0.044               | 0.450                       | 0.124            | -.0444                                 | 0.357               | 0.131  | 0.450                       | .0043            | -.0345                                 | .0805               | 0.045  | 0.450                       | .0031            | -.0030                                 | .0499               | 0.447  | 0.032                      |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.600                       | 0.075           | -.0106           | 0.146                                  | 0.066               | 0.600                       | 0.137            | -.0371                                 | 0.271               | 0.121  | 0.600                       | .0162            | -.1042                                 | .0445               | 0.143  | 0.600                       | .0031            | -.0161                                 | .0526               | 0.027  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.750                       | 0.124           | -.0192           | 0.155                                  | 0.088               | 0.750                       | 0.153            | -.0344                                 | 0.225               | 0.109  | 0.750                       | .0158            | -.0575                                 | .0365               | 0.112  | 0.750                       | .0032            | -.0156                                 | .0489               | 0.022  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 1.000                       | 0.000           | .0000            | 0.000                                  | 0.000               | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| M = 0.700 $\alpha = 11.74$  |                 |                  |                                        |                     | M = 1.099 $\alpha = 0.393$  |                  |                                        |                     |        | M = 1.299 $\alpha = 15.72$  |                  |                                        |                     |        | M = 2.231 $\alpha = 0.418$  |                  |                                        |                     |        |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.011                       | -1.091          | .3003            | 0.275                                  | -1.684              | 0.011                       | 0.063            | -.0586                                 | 0.926               | 0.097  | 0.011                       | -0.610           | .3073                                  | 0.503               | -0.942 | 0.011                       | -0.085           | .0635                                  | 0.748               | -0.131 |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.150                       | -0.548          | .1354            | 0.247                                  | -0.766              | 0.150                       | 0.128            | -.0846                                 | 0.663               | 0.178  | 0.150                       | -0.453           | .2187                                  | 0.483               | -0.633 | 0.150                       | .0007            | .0001                                  | -0.016              | 0.010  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.300                       | -0.184          | .0084            | 0.154                                  | -0.226              | 0.300                       | 0.161            | -.0886                                 | 0.538               | 0.197  | 0.300                       | -.0221           | .0942                                  | 0.427               | -0.271 | 0.300                       | .0057            | -.0299                                 | .0527               | 0.069  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.450                       | -0.051          | -.0048           | -0.093                                 | -0.054              | 0.450                       | 0.138            | -.0614                                 | 0.392               | 0.165  | 0.450                       | .0075            | -.0601                                 | .0798               | 0.079  | 0.450                       | .0054            | -.0199                                 | .0369               | 0.057  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.600                       | 0.047           | -.0182           | 0.389                                  | 0.041               | 0.600                       | 0.138            | -.0289                                 | 0.209               | 0.122  | 0.600                       | .0278            | -.1231                                 | .552                | 0.197  | 0.600                       | .0062            | -.0263                                 | .0424               | 0.054  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.750                       | 0.127           | -.0265           | 0.209                                  | 0.090               | 0.750                       | 0.183            | -.0011                                 | 0.333               | 0.131  | 0.750                       | .0378            | -.0597                                 | .076                | 0.175  | 0.750                       | .0064            | -.0274                                 | .0430               | 0.040  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 1.000                       | 0.000           | .0000            | 0.000                                  | 0.000               | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| M = 0.699 $\alpha = 15.76$  |                 |                  |                                        |                     | M = 1.300 $\alpha = -0.408$ |                  |                                        |                     |        | M = 1.503 $\alpha = 0.378$  |                  |                                        |                     |        | M = 2.236 $\alpha = 0.826$  |                  |                                        |                     |        |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.011                       | -0.641          | .1402            | 0.219                                  | -0.990              | 0.011                       | 0.013            | -.0342                                 | 2.682               | 0.019  | 0.011                       | -0.062           | .0421                                  | 0.681               | -0.095 | 0.011                       | -0.089           | .0660                                  | 0.741               | -0.137 |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.150                       | -0.047          | .2095            | 0.150                                  | -0.958              | 0.150                       | 0.104            | -.0095                                 | 0.611               | 0.102  | 0.150                       | -0.004           | .0001                                  | .0134               | .97268 | 0.002                       | 0.150            | -0.002                                 | .0057               | 2.772  | -0.002                     |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.300                       | -0.589          | .2017            | 0.362                                  | -0.723              | 0.300                       | -0.011           | .0074                                  | -0.209              | 0.092  | 0.300                       | -0.054           | -.0123                                 | 0.228               | 0.06   | 0.300                       | .0047            | .0236                                  | .0497               | 0.058  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.450                       | -0.344          | .1076            | 0.312                                  | -0.364              | 0.450                       | -0.007           | -.0160                                 | -2.394              | -0.007 | 0.450                       | .0090            | -.0324                                 | 0.360               | 0.095  | 0.450                       | .0051            | -.0158                                 | .0310               | 0.053  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.600                       | -0.044          | .0293            | 0.672                                  | -0.038              | 0.600                       | -0.004           | -.0186                                 | -4.633              | -0.003 | 0.600                       | .0106            | -.0440                                 | .0415               | .094   | 0.600                       | .0071            | -.0257                                 | .0364               | 0.062  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 0.750                       | 0.137           | -.0195           | 0.142                                  | 0.097               | 0.750                       | -0.017           | -.0063                                 | -0.362              | -0.012 | 0.750                       | .0087            | -.0270                                 | 0.310               | 0.062  | 0.750                       | .0078            | -.0284                                 | .0363               | 0.055  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |
| 1.000                       | 0.000           | .0000            | 0.000                                  | 0.000               | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  | 1.000                       | 0.000            | .0000                                  | 0.000               | 0.000  |                            |                  |                                        |                     |        |                 |                  |                                        |                     |



TABLE XI.- SECTION COEFFICIENTS FOR THE BODY WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $x/l$  OF 0 AND 1.0 WERE OBTAINED BY EXTRAPOLATION  
(a) BVW

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| $x/l$                            | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                           | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                            | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                           | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                            | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                           | $C_{N_B}$ | $C_{Y_B}$ | $x/l$ | $C_{N_B}$ | $C_{Y_B}$ | $x/l$ | $C_{N_B}$ | $C_{Y_B}$ |
|----------------------------------|-----------|-----------|---------------------------------|-----------|-----------|----------------------------------|-----------|-----------|---------------------------------|-----------|-----------|----------------------------------|-----------|-----------|---------------------------------|-----------|-----------|-------|-----------|-----------|-------|-----------|-----------|
| $M = 0.700$<br>$\alpha = -0.415$ |           |           | $M = 0.700$<br>$\alpha = 07.96$ |           |           | $M = 1.302$<br>$\alpha = -03.90$ |           |           | $M = 1.302$<br>$\alpha = 08.11$ |           |           | $M = 2.228$<br>$\alpha = -03.75$ |           |           | $M = 2.229$<br>$\alpha = 08.31$ |           |           |       |           |           |       |           |           |
| 0.0000                           | -0.035    | -0.044    | 0.0000                          | 0.070     | -0.049    | 0.0000                           | -0.006    | -0.058    | 0.0000                          | 0.070     | -0.049    | 0.0000                           | -0.044    | -0.075    | 0.0000                          | 0.050     | -0.075    |       |           |           |       |           |           |
| 0.0500                           | -0.027    | -0.029    | 0.0500                          | 0.053     | -0.031    | 0.0500                           | -0.025    | -0.029    | 0.0500                          | 0.054     | -0.031    | 0.0500                           | -0.025    | -0.030    | 0.0500                          | 0.050     | -0.031    |       |           |           |       |           |           |
| 0.1000                           | -0.021    | -0.022    | 0.1000                          | 0.042     | -0.023    | 0.1000                           | -0.025    | -0.019    | 0.1000                          | 0.042     | -0.022    | 0.1000                           | -0.016    | -0.015    | 0.1000                          | 0.046     | -0.017    |       |           |           |       |           |           |
| 0.1353                           | -0.018    | -0.022    | 0.1353                          | 0.037     | -0.023    | 0.1353                           | -0.014    | -0.023    | 0.1353                          | 0.036     | -0.021    | 0.1353                           | -0.017    | -0.022    | 0.1353                          | 0.041     | -0.024    |       |           |           |       |           |           |
| 0.2090                           | -0.015    | -0.016    | 0.2090                          | 0.032     | -0.016    | 0.2090                           | -0.014    | -0.017    | 0.2090                          | 0.032     | -0.018    | 0.2090                           | -0.012    | -0.017    | 0.2090                          | 0.032     | -0.019    |       |           |           |       |           |           |
| 0.2500                           | -0.013    | -0.014    | 0.2500                          | 0.027     | -0.015    | 0.2500                           | -0.012    | -0.016    | 0.2500                          | 0.029     | -0.016    | 0.2500                           | -0.012    | -0.014    | 0.2500                          | 0.029     | -0.018    |       |           |           |       |           |           |
| 0.3000                           | -0.013    | -0.012    | 0.3000                          | 0.025     | -0.013    | 0.3000                           | -0.012    | -0.013    | 0.3000                          | 0.026     | -0.014    | 0.3000                           | -0.011    | -0.012    | 0.3000                          | 0.026     | -0.014    |       |           |           |       |           |           |
| 0.3500                           | -0.013    | -0.010    | 0.3500                          | 0.025     | -0.011    | 0.3500                           | -0.006    | -0.010    | 0.3500                          | 0.017     | -0.012    | 0.3500                           | -0.010    | -0.011    | 0.3500                          | 0.023     | -0.013    |       |           |           |       |           |           |
| 0.4000                           | -0.015    | -0.009    | 0.4000                          | 0.032     | -0.010    | 0.4000                           | -0.010    | -0.010    | 0.4000                          | 0.020     | -0.010    | 0.4000                           | -0.009    | -0.011    | 0.4000                          | 0.021     | -0.013    |       |           |           |       |           |           |
| 0.4500                           | -0.037    | 0.002     | 0.4500                          | 0.083     | -0.008    | 0.4500                           | -0.014    | -0.006    | 0.4500                          | 0.027     | -0.010    | 0.4500                           | -0.007    | -0.005    | 0.4500                          | 0.021     | -0.011    |       |           |           |       |           |           |
| 0.5000                           | -0.048    | -0.002    | 0.5000                          | 0.102     | -0.009    | 0.5000                           | -0.027    | -0.001    | 0.5000                          | 0.045     | -0.027    | 0.5000                           | -0.009    | -0.007    | 0.5000                          | 0.025     | -0.013    |       |           |           |       |           |           |
| 0.5950                           | -0.049    | 0.002     | 0.5950                          | 0.100     | -0.006    | 0.5950                           | -0.035    | -0.003    | 0.5950                          | 0.082     | -0.004    | 0.5950                           | -0.013    | -0.001    | 0.5950                          | 0.043     | -0.004    |       |           |           |       |           |           |
| 0.7050                           | -0.040    | 0.005     | 0.7050                          | 0.077     | -0.014    | 0.7050                           | -0.042    | 0.000     | 0.7050                          | 0.077     | -0.014    | 0.7050                           | -0.018    | 0.002     | 0.7050                          | 0.041     | -0.011    |       |           |           |       |           |           |
| 0.8000                           | -0.025    | 0.009     | 0.8000                          | 0.061     | 0.003     | 0.8000                           | -0.037    | 0.004     | 0.8000                          | 0.087     | 0.001     | 0.8000                           | -0.014    | 0.003     | 0.8000                          | 0.047     | -0.006    |       |           |           |       |           |           |
| 0.9000                           | -0.003    | 0.007     | 0.9000                          | 0.022     | 0.002     | 0.9000                           | -0.044    | 0.021     | 0.9000                          | 0.067     | -0.007    | 0.9000                           | -0.015    | 0.005     | 0.9000                          | 0.044     | -0.005    |       |           |           |       |           |           |
| 0.9500                           | -0.002    | 0.009     | 0.9500                          | 0.011     | 0.005     | 0.9500                           | -0.016    | 0.019     | 0.9500                          | 0.046     | 0.023     | 0.9500                           | -0.008    | 0.008     | 0.9500                          | 0.037     | -0.001    |       |           |           |       |           |           |
| 0.9900                           | -0.003    | 0.003     | 0.9900                          | 0.009     | 0.004     | 0.9900                           | 0.007     | 0.019     | 0.9900                          | 0.009     | 0.016     | 0.9900                           | -0.006    | 0.011     | 0.9900                          | 0.024     | 0.006     |       |           |           |       |           |           |
| 1.0000                           | -0.003    | 0.001     | 1.0000                          | 0.010     | 0.003     | 1.0000                           | 0.012     | 0.019     | 1.0000                          | -0.003    | 0.010     | 1.0000                           | -0.005    | 0.011     | 1.0000                          | 0.020     | 0.008     |       |           |           |       |           |           |
| $M = 0.700$<br>$\alpha = -00.05$ |           |           | $M = 0.697$<br>$\alpha = 11.96$ |           |           | $M = 1.304$<br>$\alpha = -00.05$ |           |           | $M = 1.302$<br>$\alpha = 12.21$ |           |           | $M = 2.232$<br>$\alpha = 00.30$  |           |           | $M = 2.232$<br>$\alpha = 12.41$ |           |           |       |           |           |       |           |           |
| 0.0000                           | 0.001     | -0.047    | 0.0000                          | 0.113     | -0.047    | 0.0000                           | 0.006     | -0.052    | 0.0000                          | 0.085     | -0.051    | 0.0000                           | -0.011    | -0.073    | 0.0000                          | 0.074     | -0.080    |       |           |           |       |           |           |
| 0.0500                           | 0.000     | -0.030    | 0.0500                          | 0.083     | -0.030    | 0.0500                           | 0.003     | -0.030    | 0.0500                          | 0.080     | -0.032    | 0.0500                           | -0.003    | -0.031    | 0.0500                          | 0.078     | -0.034    |       |           |           |       |           |           |
| 0.1000                           | 0.000     | -0.022    | 0.1000                          | 0.063     | -0.025    | 0.1000                           | -0.001    | -0.020    | 0.1000                          | 0.068     | -0.023    | 0.1000                           | 0.000     | -0.023    | 0.1000                          | 0.073     | -0.018    |       |           |           |       |           |           |
| 0.1353                           | 0.001     | -0.021    | 0.1353                          | 0.055     | -0.024    | 0.1353                           | 0.005     | -0.024    | 0.1353                          | 0.055     | -0.023    | 0.1353                           | 0.000     | -0.022    | 0.1353                          | 0.064     | -0.025    |       |           |           |       |           |           |
| 0.2090                           | 0.001     | -0.015    | 0.2090                          | 0.048     | -0.018    | 0.2090                           | -0.000    | -0.018    | 0.2090                          | 0.050     | -0.019    | 0.2090                           | 0.002     | -0.017    | 0.2090                          | 0.057     | -0.021    |       |           |           |       |           |           |
| 0.2500                           | 0.000     | -0.014    | 0.2500                          | 0.043     | -0.017    | 0.2500                           | -0.002    | -0.016    | 0.2500                          | 0.045     | -0.017    | 0.2500                           | 0.001     | -0.015    | 0.2500                          | 0.051     | -0.020    |       |           |           |       |           |           |
| 0.3000                           | -0.000    | -0.011    | 0.3000                          | 0.042     | -0.015    | 0.3000                           | -0.002    | -0.013    | 0.3000                          | 0.039     | -0.017    | 0.3000                           | 0.001     | -0.012    | 0.3000                          | 0.048     | -0.017    |       |           |           |       |           |           |
| 0.3500                           | 0.000     | -0.010    | 0.3500                          | 0.043     | -0.014    | 0.3500                           | 0.002     | -0.010    | 0.3500                          | 0.038     | -0.014    | 0.3500                           | -0.001    | -0.010    | 0.3500                          | 0.044     | -0.017    |       |           |           |       |           |           |
| 0.4000                           | 0.001     | -0.009    | 0.4000                          | 0.055     | -0.014    | 0.4000                           | 0.003     | -0.009    | 0.4000                          | 0.033     | -0.013    | 0.4000                           | 0.000     | -0.010    | 0.4000                          | 0.040     | -0.017    |       |           |           |       |           |           |
| 0.4500                           | 0.002     | -0.002    | 0.4500                          | 0.133     | -0.008    | 0.4500                           | 0.000     | -0.004    | 0.4500                          | 0.045     | -0.012    | 0.4500                           | 0.002     | -0.008    | 0.4500                          | 0.039     | -0.017    |       |           |           |       |           |           |
| 0.5000                           | 0.001     | -0.002    | 0.5000                          | 0.169     | -0.008    | 0.5000                           | 0.000     | -0.001    | 0.5000                          | 0.094     | -0.023    | 0.5000                           | 0.002     | -0.006    | 0.5000                          | 0.045     | -0.021    |       |           |           |       |           |           |
| 0.5950                           | -0.001    | -0.001    | 0.5950                          | 0.163     | -0.017    | 0.5950                           | -0.000    | 0.001     | 0.5950                          | 0.133     | -0.010    | 0.5950                           | 0.002     | -0.001    | 0.5950                          | 0.058     | -0.016    |       |           |           |       |           |           |
| 0.7050                           | -0.001    | 0.002     | 0.7050                          | 0.112     | -0.020    | 0.7050                           | -0.005    | -0.000    | 0.7050                          | 0.133     | -0.009    | 0.7050                           | 0.001     | -0.001    | 0.7050                          | 0.065     | -0.011    |       |           |           |       |           |           |
| 0.8000                           | 0.005     | 0.009     | 0.8000                          | 0.083     | 0.010     | 0.8000                           | 0.001     | 0.003     | 0.8000                          | 0.135     | -0.007    | 0.8000                           | 0.004     | 0.001     | 0.8000                          | 0.074     | -0.004    |       |           |           |       |           |           |
| 0.9000                           | 0.005     | 0.009     | 0.9000                          | 0.040     | 0.015     | 0.9000                           | 0.000     | 0.016     | 0.9000                          | 0.100     | 0.009     | 0.9000                           | 0.001     | -0.001    | 0.9000                          | 0.070     | -0.011    |       |           |           |       |           |           |
| 0.9500                           | 0.002     | 0.009     | 0.9500                          | 0.019     | 0.011     | 0.9500                           | 0.003     | 0.021     | 0.9500                          | 0.054     | 0.022     | 0.9500                           | 0.001     | 0.003     | 0.9500                          | 0.057     | -0.003    |       |           |           |       |           |           |
| 0.9900                           | -0.000    | 0.001     | 0.9900                          | 0.016     | 0.005     | 0.9900                           | 0.007     | 0.029     | 0.9900                          | 0.012     | 0.015     | 0.9900                           | 0.002     | 0.010     | 0.9900                          | 0.035     | -0.001    |       |           |           |       |           |           |
| 1.0000                           | -0.000    | -0.003    | 1.0000                          | 0.017     | 0.004     | 1.0000                           | 0.008     | 0.032     | 1.0000                          | 0.000     | 0.010     | 1.0000                           | 0.003     | 0.012     | 1.0000                          | 0.028     | -0.001    |       |           |           |       |           |           |
| $M = 0.698$<br>$\alpha = 03.91$  |           |           | $M = 0.699$<br>$\alpha = 15.87$ |           |           | $M = 1.303$<br>$\alpha = 04.11$  |           |           | $M = 1.300$<br>$\alpha = 16.07$ |           |           | $M = 2.232$<br>$\alpha = 04.36$  |           |           | $M = 2.232$<br>$\alpha = 16.32$ |           |           |       |           |           |       |           |           |
| 0.0000                           | 0.038     | -0.050    | 0.0000                          | 0.117     | -0.048    | 0.0000                           | 0.021     | -0.052    | 0.0000                          | 0.111     | -0.053    | 0.0000                           | 0.020     | -0.077    | 0.0000                          | 0.117     | -0.086    |       |           |           |       |           |           |
| 0.0500                           | 0.026     | -0.031    | 0.0500                          | 0.101     | -0.033    | 0.0500                           | 0.022     | -0.032    | 0.0500                          | 0.101     | -0.033    | 0.0500                           | 0.026     | -0.032    | 0.0500                          | 0.112     | -0.037    |       |           |           |       |           |           |
| 0.1000                           | 0.020     | -0.022    | 0.1000                          | 0.086     | -0.026    | 0.1000                           | 0.021     | -0.021    | 0.1000                          | 0.089     | -0.025    | 0.1000                           | 0.025     | -0.016    | 0.1000                          | 0.103     | -0.021    |       |           |           |       |           |           |
| 0.1353                           | 0.019     | -0.022    | 0.1353                          | 0.075     | -0.026    | 0.1353                           | 0.019     | -0.020    | 0.1353                          | 0.080     | -0.026    | 0.1353                           | 0.021     | -0.023    | 0.1353                          | 0.094     | -0.030    |       |           |           |       |           |           |
| 0.2090                           | 0.016     | -0.015    | 0.2090                          | 0.065     | -0.021    | 0.2090                           | 0.016     | -0.018    | 0.2090                          | 0.070     | -0.024    | 0.2090                           | 0.016     | -0.018    | 0.2090                          | 0.085     | -0.027    |       |           |           |       |           |           |
| 0.2500                           | 0.013     | -0.014    | 0.2500                          | 0.059     | -0.020    | 0.2500                           | 0.015     | -0.016    | 0.2500                          | 0.063     | -0.024    | 0.2500                           | 0.015     | -0.016    | 0.2500                          | 0.077     | -0.025    |       |           |           |       |           |           |
| 0.3000                           | 0.012     | -0.012    | 0.3000                          | 0.058     | -0.018    | 0.3000                           | 0.015     | -0.013    | 0.3000                          | 0.056     | -0.021    | 0.3000                           | 0.013     | -0.012    | 0.3000                          | 0.074     | -0.022    |       |           |           |       |           |           |
| 0.3500                           | 0.012     | -0.010    | 0.3500                          | 0.063     | -0.017    | 0.3500                           | 0.009     | -0.011    | 0.3500                          | 0.052     | -0.019    | 0.3500                           | 0.010     | -0.011    | 0.3500                          | 0.070     | -0.022    |       |           |           |       |           |           |
| 0.4000                           | 0.015     | -0.009    | 0.4000                          | 0.080     | -0.019    | 0.4000                           | 0.010     | -0.009    | 0.4000                          | 0.049     | -0.019    | 0.4000                           | 0.010     | -0.011    | 0.4000                          | 0.067     | -0.022    |       |           |           |       |           |           |
| 0.4500                           | 0.037     | -0.006    | 0.4500                          | 0.173     | -0.008    | 0.4500                           | 0.010     | -0.007    | 0.4500                          | 0.066     | -0.016    | 0.4500                           | 0.010     | -0.005    | 0.4500                          | 0.066     | -0.023    |       |           |           |       |           |           |
| 0.5000                           | 0.046     | -0.004    | 0.5000                          | 0.251     | -0.020    | 0.5000                           | 0.026     | -0.001    | 0.5000                          | 0.116     | -0.044    | 0.5000                           | 0.013     | -0.011    | 0.5000                          | 0.078     | -0.016    |       |           |           |       |           |           |
| 0.5950                           | 0.046     | -0.004    | 0.5950                          | 0.230     | -0.023    | 0.5950                           | 0.038     | -0.003    | 0.5950                          | 0.188     | -0.017    | 0.5950                           | 0.023     | -0.005    | 0.5950                          | 0.083     | -0.026    |       |           |           |       |           |           |



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| $x/l$                                    | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                           | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                                    | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                                   | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                                    | $C_{N_B}$ | $C_{Y_B}$ | $x/l$                                  | $C_{N_B}$ | $C_{Y_B}$ | $x/l$ | $C_{N_B}$ | $C_{Y_B}$ | $x/l$ | $C_{N_B}$ | $C_{Y_B}$ | $x/l$ | $C_{N_B}$ | $C_{Y_B}$ | $x/l$ | $C_{N_B}$ | $C_{Y_B}$ |  |
|------------------------------------------|-----------|-----------|---------------------------------|-----------|-----------|------------------------------------------|-----------|-----------|-----------------------------------------|-----------|-----------|------------------------------------------|-----------|-----------|----------------------------------------|-----------|-----------|-------|-----------|-----------|-------|-----------|-----------|-------|-----------|-----------|-------|-----------|-----------|--|
| $M = 0.699$<br>$\alpha = -0.4 \times 10$ |           |           | $M = 0.700$<br>$\alpha = 07.96$ |           |           | $M = 1.304$<br>$\alpha = -0.3 \times 90$ |           |           | $M = 1.304$<br>$\alpha = .08 \times 01$ |           |           | $M = 2.229$<br>$\alpha = -0.3 \times 65$ |           |           | $M = 2.236$<br>$\alpha = 08 \times 36$ |           |           |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.0000                                   | -0.012    | -0.033    | 0.0000                          | -0.031    | -0.038    | 0.0000                                   | -0.024    | -0.066    | 0.0000                                  | -0.011    | -0.053    | 0.0000                                   | -0.043    | -0.071    | 0.0000                                 | 0.046     | -0.059    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.0500                                   | -0.032    | -0.021    | 0.0500                          | 0.063     | -0.033    | 0.0500                                   | -0.026    | -0.034    | 0.0500                                  | -0.032    | -0.080    | 0.0500                                   | -0.025    | -0.030    | 0.0500                                 | 0.051     | -0.032    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.1000                                   | -0.044    | -0.015    | 0.1000                          | 0.103     | -0.037    | 0.1000                                   | -0.026    | -0.017    | 0.1000                                  | 0.079     | -0.022    | 0.1000                                   | -0.015    | -0.010    | 0.1000                                 | 0.058     | -0.022    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.1353                                   | -0.048    | -0.015    | 0.1353                          | 0.098     | -0.046    | 0.1353                                   | -0.034    | -0.022    | 0.1353                                  | 0.087     | -0.024    | 0.1353                                   | -0.024    | -0.021    | 0.1353                                 | 0.063     | -0.026    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.2090                                   | -0.033    | -0.016    | 0.2090                          | 0.055     | -0.029    | 0.2090                                   | -0.036    | -0.015    | 0.2090                                  | 0.090     | -0.021    | 0.2090                                   | -0.024    | -0.014    | 0.2090                                 | 0.063     | -0.018    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.2500                                   | -0.013    | -0.004    | 0.2500                          | 0.013     | -0.027    | 0.2500                                   | -0.025    | -0.020    | 0.2500                                  | 0.069     | -0.018    | 0.2500                                   | -0.022    | -0.012    | 0.2500                                 | 0.057     | -0.015    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.3000                                   | -0.014    | -0.010    | 0.3000                          | 0.014     | -0.014    | 0.3000                                   | -0.011    | -0.015    | 0.3000                                  | 0.024     | -0.010    | 0.3000                                   | -0.016    | -0.013    | 0.3000                                 | 0.042     | -0.014    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.3500                                   | -0.012    | -0.008    | 0.3500                          | 0.016     | -0.009    | 0.3500                                   | -0.001    | -0.009    | 0.3500                                  | 0.006     | -0.009    | 0.3500                                   | -0.012    | -0.013    | 0.3500                                 | 0.028     | -0.009    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.4000                                   | -0.011    | -0.004    | 0.4000                          | 0.021     | -0.010    | 0.4000                                   | -0.006    | -0.009    | 0.4000                                  | 0.009     | -0.007    | 0.4000                                   | -0.009    | -0.009    | 0.4000                                 | 0.021     | -0.008    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.4500                                   | -0.026    | 0.001     | 0.4500                          | 0.059     | -0.003    | 0.4500                                   | -0.008    | -0.004    | 0.4500                                  | 0.011     | -0.005    | 0.4500                                   | -0.006    | -0.008    | 0.4500                                 | 0.020     | -0.008    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.5000                                   | -0.037    | 0.001     | 0.5000                          | 0.085     | 0.001     | 0.5000                                   | -0.014    | -0.000    | 0.5000                                  | 0.036     | -0.005    | 0.5000                                   | -0.034    | -0.004    | 0.5000                                 | 0.025     | -0.013    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.5950                                   | -0.044    | 0.002     | 0.5950                          | 0.097     | 0.000     | 0.5950                                   | -0.026    | 0.003     | 0.5950                                  | 0.064     | -0.001    | 0.5950                                   | -0.008    | 0.000     | 0.5950                                 | 0.038     | -0.009    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.7050                                   | -0.037    | 0.004     | 0.7050                          | 0.082     | 0.003     | 0.7050                                   | -0.037    | 0.003     | 0.7050                                  | 0.073     | -0.007    | 0.7050                                   | -0.016    | 0.003     | 0.7050                                 | 0.042     | -0.007    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.8000                                   | -0.025    | 0.012     | 0.8000                          | 0.054     | 0.002     | 0.8000                                   | -0.036    | 0.007     | 0.8000                                  | 0.086     | 0.002     | 0.8000                                   | -0.019    | 0.005     | 0.8000                                 | 0.045     | -0.005    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.9000                                   | -0.004    | 0.015     | 0.9000                          | 0.019     | 0.012     | 0.9000                                   | -0.035    | 0.024     | 0.9000                                  | 0.066     | 0.014     | 0.9000                                   | -0.018    | 0.003     | 0.9000                                 | 0.044     | -0.002    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.9500                                   | 0.001     | 0.010     | 0.9500                          | 0.013     | 0.006     | 0.9500                                   | -0.013    | 0.021     | 0.9500                                  | 0.039     | 0.029     | 0.9500                                   | -0.012    | 0.004     | 0.9500                                 | 0.034     | -0.002    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.9900                                   | -0.002    | 0.004     | 0.9900                          | 0.009     | 0.002     | 0.9900                                   | 0.010     | 0.019     | 0.9900                                  | 0.004     | 0.016     | 0.9900                                   | -0.004    | 0.011     | 0.9900                                 | 0.021     | 0.004     |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 1.0000                                   | -0.004    | 0.002     | 1.0000                          | 0.008     | 0.002     | 1.0000                                   | 0.016     | 0.019     | 1.0000                                  | -0.007    | 0.009     | 1.0000                                   | -0.002    | 0.013     | 1.0000                                 | 0.017     | 0.006     |       |           |           |       |           |           |       |           |           |       |           |           |  |
| $M = 0.700$<br>$\alpha = -0.0 \times 05$ |           |           | $M = 0.698$<br>$\alpha = 12.01$ |           |           | $M = 1.301$<br>$\alpha = 00.15$          |           |           | $M = 1.302$<br>$\alpha = 12.16$         |           |           | $M = 2.233$<br>$\alpha = 00.35$          |           |           | $M = 2.228$<br>$\alpha = 12.41$        |           |           |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.0000                                   | -0.008    | -0.035    | 0.0000                          | -0.103    | -0.068    | 0.0000                                   | -0.001    | -0.054    | 0.0000                                  | -0.010    | -0.022    | 0.0000                                   | -0.012    | -0.070    | 0.0000                                 | 0.068     | -0.055    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.0500                                   | -0.005    | -0.027    | 0.0500                          | 0.089     | -0.043    | 0.0500                                   | 0.004     | -0.030    | 0.0500                                  | 0.081     | -0.032    | 0.0500                                   | 0.000     | -0.031    | 0.0500                                 | 0.079     | -0.034    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.1000                                   | -0.001    | -0.020    | 0.1000                          | 0.173     | -0.027    | 0.1000                                   | 0.003     | -0.018    | 0.1000                                  | 0.125     | -0.031    | 0.1000                                   | 0.004     | -0.016    | 0.1000                                 | 0.087     | -0.028    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.1353                                   | 0.001     | -0.015    | 0.1353                          | 0.167     | -0.023    | 0.1353                                   | -0.001    | -0.017    | 0.1353                                  | 0.140     | -0.022    | 0.1353                                   | 0.002     | -0.020    | 0.1353                                 | 0.093     | -0.033    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.2090                                   | -0.002    | -0.021    | 0.2090                          | 0.079     | -0.035    | 0.2090                                   | 0.006     | -0.016    | 0.2090                                  | 0.141     | -0.018    | 0.2090                                   | 0.004     | -0.016    | 0.2090                                 | 0.066     | -0.020    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.2500                                   | -0.003    | -0.012    | 0.2500                          | 0.037     | -0.018    | 0.2500                                   | 0.001     | -0.019    | 0.2500                                  | 0.098     | -0.015    | 0.2500                                   | 0.003     | -0.013    | 0.2500                                 | 0.087     | -0.013    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.3000                                   | -0.005    | -0.012    | 0.3000                          | 0.024     | -0.011    | 0.3000                                   | -0.002    | -0.016    | 0.3000                                  | 0.034     | -0.005    | 0.3000                                   | 0.002     | -0.013    | 0.3000                                 | 0.061     | -0.012    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.3500                                   | -0.002    | -0.007    | 0.3500                          | 0.034     | -0.009    | 0.3500                                   | 0.003     | -0.007    | 0.3500                                  | 0.017     | -0.012    | 0.3500                                   | -0.000    | -0.013    | 0.3500                                 | 0.046     | -0.008    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.4000                                   | 0.000     | -0.007    | 0.4000                          | 0.043     | -0.011    | 0.4000                                   | 0.001     | -0.008    | 0.4000                                  | 0.018     | -0.009    | 0.4000                                   | 0.000     | -0.012    | 0.4000                                 | 0.037     | -0.006    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.4500                                   | 0.000     | 0.000     | 0.4500                          | 0.103     | 0.001     | 0.4500                                   | -0.001    | -0.003    | 0.4500                                  | 0.027     | -0.009    | 0.4500                                   | 0.002     | -0.007    | 0.4500                                 | 0.035     | -0.009    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.5000                                   | -0.002    | -0.003    | 0.5000                          | 0.142     | -0.005    | 0.5000                                   | -0.000    | -0.002    | 0.5000                                  | 0.072     | -0.003    | 0.5000                                   | 0.002     | -0.006    | 0.5000                                 | 0.041     | -0.012    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.5950                                   | -0.001    | -0.000    | 0.5950                          | 0.155     | -0.004    | 0.5950                                   | 0.001     | -0.001    | 0.5950                                  | 0.118     | -0.004    | 0.5950                                   | 0.003     | -0.000    | 0.5950                                 | 0.060     | -0.020    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.7050                                   | -0.002    | 0.002     | 0.7050                          | 0.115     | -0.011    | 0.7050                                   | -0.003    | -0.001    | 0.7050                                  | 0.125     | -0.005    | 0.7050                                   | 0.001     | -0.002    | 0.7050                                 | 0.066     | -0.014    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.8000                                   | 0.004     | 0.011     | 0.8000                          | 0.072     | 0.005     | 0.8000                                   | 0.001     | 0.004     | 0.8000                                  | 0.131     | -0.005    | 0.8000                                   | -0.003    | 0.002     | 0.8000                                 | 0.072     | -0.007    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.9000                                   | 0.005     | 0.011     | 0.9000                          | 0.030     | 0.016     | 0.9000                                   | -0.000    | 0.023     | 0.9000                                  | 0.094     | -0.003    | 0.9000                                   | 0.002     | 0.000     | 0.9000                                 | 0.069     | -0.001    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.9500                                   | 0.005     | 0.008     | 0.9500                          | 0.020     | 0.010     | 0.9500                                   | 0.011     | 0.028     | 0.9500                                  | 0.043     | 0.021     | 0.9500                                   | 0.001     | 0.002     | 0.9500                                 | 0.049     | -0.009    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.9900                                   | 0.000     | 0.004     | 0.9900                          | 0.017     | 0.005     | 0.9900                                   | 0.008     | 0.024     | 0.9900                                  | 0.003     | 0.025     | 0.9900                                   | 0.003     | 0.009     | 0.9900                                 | 0.032     | 0.004     |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 1.0000                                   | -0.001    | 0.003     | 1.0000                          | 0.017     | 0.004     | 1.0000                                   | 0.006     | 0.027     | 1.0000                                  | -0.008    | 0.024     | 1.0000                                   | 0.004     | 0.012     | 1.0000                                 | 0.028     | 0.010     |       |           |           |       |           |           |       |           |           |       |           |           |  |
| $M = 0.699$<br>$\alpha = 03.96$          |           |           | $M = 0.700$<br>$\alpha = 15.87$ |           |           | $M = 1.301$<br>$\alpha = 04.11$          |           |           | $M = 1.302$<br>$\alpha = 16.12$         |           |           | $M = 2.232$<br>$\alpha = 04.31$          |           |           | $M = 2.232$<br>$\alpha = 16.42$        |           |           |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.0000                                   | -0.023    | -0.060    | 0.0000                          | -0.171    | -0.066    | 0.0000                                   | -0.021    | -0.048    | 0.0000                                  | -0.004    | -0.010    | 0.0000                                   | 0.016     | -0.061    | 0.0000                                 | 0.110     | -0.065    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.0500                                   | 0.025     | -0.034    | 0.0500                          | 0.132     | -0.042    | 0.0500                                   | 0.003     | -0.030    | 0.0500                                  | 0.103     | -0.032    | 0.0500                                   | 0.025     | -0.032    | 0.0500                                 | 0.113     | -0.037    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.1000                                   | 0.048     | -0.023    | 0.1000                          | 0.261     | -0.029    | 0.1000                                   | 0.039     | -0.021    | 0.1000                                  | 0.171     | -0.034    | 0.1000                                   | 0.031     | -0.020    | 0.1000                                 | 0.119     | -0.030    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.1353                                   | 0.051     | -0.023    | 0.1353                          | 0.248     | -0.026    | 0.1353                                   | 0.044     | -0.020    | 0.1353                                  | 0.195     | -0.024    | 0.1353                                   | 0.033     | -0.023    | 0.1353                                 | 0.127     | -0.038    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.2090                                   | 0.027     | 0.020     | 0.2090                          | 0.127     | -0.020    | 0.2090                                   | 0.046     | -0.018    | 0.2090                                  | 0.191     | -0.011    | 0.2090                                   | 0.032     | -0.016    | 0.2090                                 | 0.132     | -0.022    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.2500                                   | 0.015     | -0.016    | 0.2500                          | 0.051     | -0.017    | 0.2500                                   | 0.000     | -0.018    | 0.2500                                  | 0.235     | -0.015    | 0.2500                                   | 0.028     | -0.014    | 0.2500                                 | 0.118     | -0.016    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.3000                                   | 0.008     | -0.012    | 0.3000                          | 0.049     | -0.007    | 0.3000                                   | 0.014     | -0.014    | 0.3000                                  | 0.050     | 0.004     | 0.3000                                   | 0.022     | -0.013    | 0.3000                                 | 0.085     | -0.009    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.3500                                   | 0.009     | -0.010    | 0.3500                          | 0.052     | -0.009    | 0.3500                                   | 0.003     | -0.009    | 0.3500                                  | 0.032     | -0.008    | 0.3500                                   | 0.012     | -0.012    | 0.3500                                 | 0.069     | -0.005    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.4000                                   | 0.010     | -0.009    | 0.4000                          | 0.061     | -0.008    | 0.4000                                   | 0.005     | -0.008    | 0.4000                                  | 0.020     | -0.010    | 0.4000                                   | 0.010     | -0.011    | 0.4000                                 | 0.059     | -0.004    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.4500                                   | 0.020     | -0.004    | 0.4500                          | 0.143     | 0.001     | 0.4500                                   | 0.002     | -0.007    | 0.4500                                  | 0.045     | -0.009    | 0.4500                                   | 0.010     | -0.006    | 0.4500                                 | 0.054     | -0.008    |       |           |           |       |           |           |       |           |           |       |           |           |  |
| 0.5000                                   | 0.031     | -0.002    | 0.5000                          | 0.200     | -0.007    | 0.5000                                   | 0.011     | -0.002    | 0.5000                                  | 0.092     | -0.012    | 0.5000                                   | 0.010     | -0.010    | 0.5000                                 | 0.064     | -0.       |       |           |           |       |           |           |       |           |           |       |           |           |  |



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TABLE XII.- SECTION COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $2y/b$  OF 0.175 AND 1.0 WERE OBTAINED BY EXTRAPOLATION  
(a) BVW

| $2y/b$                             | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{X_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ | $2y/b$                             | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{X_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ | $2y/b$                             | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{X_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ | $2y/b$ | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{X_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ | $2y/b$ | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{X_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ |
|------------------------------------|-----------|--------------|-----------------------------------|----------------------------|------------------------------------|-----------|--------------|-----------------------------------|----------------------------|------------------------------------|-----------|--------------|-----------------------------------|----------------------------|--------|-----------|--------------|-----------------------------------|----------------------------|--------|-----------|--------------|-----------------------------------|----------------------------|
| $M = 0.700 \quad \alpha = -0.4.15$ |           |              |                                   |                            | $M = 1.302 \quad \alpha = -0.3.90$ |           |              |                                   |                            | $M = 2.228 \quad \alpha = -0.3.75$ |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | -0.146    | 0.0489       | 0.336                             | -0.240                     | 0.175                              | -0.134    | 0.0629       | 0.470                             | -0.221                     | 0.175                              | -0.096    | 0.0459       | 0.480                             | -0.157                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | -0.152    | 0.0480       | 0.316                             | -0.243                     | 0.200                              | -0.145    | 0.0648       | 0.447                             | -0.232                     | 0.200                              | -0.091    | 0.0403       | 0.443                             | -0.145                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | -0.165    | 0.0477       | 0.290                             | -0.247                     | 0.250                              | -0.160    | 0.0668       | 0.418                             | -0.239                     | 0.250                              | -0.084    | 0.0344       | 0.407                             | -0.126                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | -0.178    | 0.0494       | 0.278                             | -0.249                     | 0.300                              | -0.165    | 0.0665       | 0.402                             | -0.231                     | 0.300                              | -0.081    | 0.0351       | 0.431                             | -0.114                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | -0.199    | 0.0488       | 0.245                             | -0.238                     | 0.400                              | -0.187    | 0.0685       | 0.365                             | -0.224                     | 0.400                              | -0.096    | 0.0364       | 0.380                             | -0.114                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | -0.325    | 0.0930       | 0.286                             | -0.260                     | 0.600                              | -0.315    | 0.1332       | 0.423                             | -0.251                     | 0.600                              | -0.155    | 0.0761       | 0.490                             | -0.124                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | -0.538    | 0.1873       | 0.348                             | -0.215                     | 0.800                              | -0.444    | 0.1739       | 0.391                             | -0.177                     | 0.800                              | -0.146    | 0.0652       | 0.448                             | -0.058                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.700 \quad \alpha = -0.0.05$ |           |              |                                   |                            | $M = 1.304 \quad \alpha = -0.0.05$ |           |              |                                   |                            | $M = 2.232 \quad \alpha = 0.0.30$  |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.022     | -0.0155      | 0.716                             | 0.035                      | 0.175                              | 0.004     | 0.0001       | -0.016                            | 0.006                      | 0.175                              | -0.014    | 0.110        | 0.796                             | -0.022                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.017     | -0.0138      | 0.795                             | 0.027                      | 0.200                              | 0.002     | -0.0009      | 0.565                             | 0.002                      | 0.200                              | -0.007    | 0.076        | 0.829                             | -0.001                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.015     | -0.0135      | 0.899                             | 0.022                      | 0.250                              | 0.002     | -0.0038      | 1.872                             | 0.003                      | 0.250                              | 0.005     | -0.0006      | 0.128                             | 0.006                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.021     | -0.0174      | 0.831                             | 0.029                      | 0.300                              | 0.008     | -0.0077      | 0.913                             | 0.011                      | 0.300                              | 0.015     | -0.0030      | 0.200                             | 0.021                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 0.031     | -0.0253      | 0.807                             | 0.037                      | 0.400                              | 0.012     | -0.0130      | 1.060                             | 0.014                      | 0.400                              | 0.012     | -0.0078      | 0.632                             | 0.014                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | -0.055    | 0.0326       | 0.592                             | -0.043                     | 0.600                              | -0.069    | 0.0494       | 0.721                             | -0.054                     | 0.600                              | -0.016    | 0.0154       | 0.993                             | -0.012                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | -0.042    | 0.0145       | 0.348                             | -0.016                     | 0.800                              | -0.048    | 0.0328       | 0.685                             | -0.019                     | 0.800                              | 0.014     | -0.0068      | 0.476                             | 0.005                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.698 \quad \alpha = 0.3.91$  |           |              |                                   |                            | $M = 1.303 \quad \alpha = 0.4.11$  |           |              |                                   |                            | $M = 2.232 \quad \alpha = 0.4.36$  |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.175     | -0.0735      | 0.421                             | 0.288                      | 0.175                              | 0.151     | -0.0683      | 0.453                             | 0.249                      | 0.175                              | 0.083     | -0.0302      | 0.366                             | 0.136                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.179     | -0.0729      | 0.408                             | 0.286                      | 0.200                              | 0.158     | -0.0716      | 0.454                             | 0.252                      | 0.200                              | 0.093     | -0.0356      | 0.384                             | 0.148                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.191     | -0.0744      | 0.390                             | 0.286                      | 0.250                              | 0.174     | -0.0793      | 0.455                             | 0.261                      | 0.250                              | 0.112     | -0.0441      | 0.395                             | 0.167                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.209     | -0.0797      | 0.381                             | 0.290                      | 0.300                              | 0.195     | -0.0888      | 0.455                             | 0.273                      | 0.300                              | 0.129     | -0.0497      | 0.387                             | 0.179                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 0.251     | -0.0953      | 0.380                             | 0.300                      | 0.400                              | 0.224     | -0.1011      | 0.455                             | 0.268                      | 0.400                              | 0.144     | -0.0529      | 0.437                             | 0.172                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | 0.203     | -0.0318      | 0.157                             | 0.162                      | 0.600                              | 0.212     | -0.0536      | 0.252                             | 0.169                      | 0.600                              | 0.146     | -0.0582      | 0.397                             | 0.117                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | 0.403     | -0.1252      | 0.311                             | 0.161                      | 0.800                              | 0.406     | -0.1451      | 0.358                             | 0.162                      | 0.800                              | 0.189     | -0.0859      | 0.454                             | 0.075                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.700 \quad \alpha = 0.7.96$  |           |              |                                   |                            | $M = 1.302 \quad \alpha = 0.8.11$  |           |              |                                   |                            | $M = 2.229 \quad \alpha = 0.8.31$  |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.362     | -0.1339      | 0.369                             | 0.598                      | 0.175                              | 0.298     | -0.1312      | 0.440                             | 0.492                      | 0.175                              | 0.171     | -0.0683      | 0.401                             | 0.281                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.361     | -0.1307      | 0.362                             | 0.577                      | 0.200                              | 0.311     | -0.1363      | 0.438                             | 0.498                      | 0.200                              | 0.190     | -0.0767      | 0.404                             | 0.303                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.378     | -0.1291      | 0.342                             | 0.566                      | 0.250                              | 0.346     | -0.1497      | 0.433                             | 0.518                      | 0.250                              | 0.221     | -0.0907      | 0.411                             | 0.330                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.422     | -0.1338      | 0.317                             | 0.591                      | 0.300                              | 0.390     | -0.1675      | 0.429                             | 0.546                      | 0.300                              | 0.242     | -0.1015      | 0.419                             | 0.339                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 0.508     | -0.1483      | 0.292                             | 0.610                      | 0.400                              | 0.440     | -0.1761      | 0.400                             | 0.528                      | 0.400                              | 0.261     | -0.1156      | 0.443                             | 0.312                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | 0.698     | -0.2182      | 0.313                             | 0.558                      | 0.600                              | 0.590     | -0.2483      | 0.421                             | 0.471                      | 0.600                              | 0.277     | -0.1210      | 0.436                             | 0.221                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | 0.608     | -0.2667      | 0.439                             | 0.243                      | 0.800                              | 0.695     | -0.3219      | 0.463                             | 0.278                      | 0.800                              | 0.323     | -0.1474      | 0.456                             | 0.129                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.697 \quad \alpha = 11.96$   |           |              |                                   |                            | $M = 1.302 \quad \alpha = 12.21$   |           |              |                                   |                            | $M = 2.232 \quad \alpha = 12.41$   |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.499     | -0.1814      | 0.363                             | 0.824                      | 0.175                              | 0.434     | -0.1906      | 0.439                             | 0.716                      | 0.175                              | 0.274     | -0.1098      | 0.401                             | 0.452                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.526     | -0.1771      | 0.337                             | 0.840                      | 0.200                              | 0.464     | -0.1949      | 0.420                             | 0.742                      | 0.200                              | 0.297     | -0.1235      | 0.415                             | 0.475                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.584     | -0.1770      | 0.303                             | 0.875                      | 0.250                              | 0.525     | -0.2117      | 0.403                             | 0.787                      | 0.250                              | 0.334     | -0.1449      | 0.434                             | 0.501                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.650     | -0.1882      | 0.289                             | 0.910                      | 0.300                              | 0.585     | -0.2397      | 0.409                             | 0.819                      | 0.300                              | 0.359     | -0.1592      | 0.444                             | 0.501                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 0.811     | -0.2430      | 0.300                             | 0.973                      | 0.400                              | 0.737     | -0.3246      | 0.440                             | 0.884                      | 0.400                              | 0.370     | -0.1671      | 0.452                             | 0.443                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | 0.722     | -0.3111      | 0.431                             | 0.577                      | 0.600                              | 0.858     | -0.4184      | 0.488                             | 0.686                      | 0.600                              | 0.396     | -0.1798      | 0.454                             | 0.317                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | 0.616     | -0.2714      | 0.441                             | 0.246                      | 0.800                              | 0.864     | -0.4118      | 0.477                             | 0.345                      | 0.800                              | 0.443     | -0.2061      | 0.465                             | 0.177                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.699 \quad \alpha = 15.87$   |           |              |                                   |                            | $M = 1.300 \quad \alpha = 16.07$   |           |              |                                   |                            | $M = 2.232 \quad \alpha = 16.32$   |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.701     | -0.2338      | 0.333                             | 1.158                      | 0.175                              | 0.643     | -0.2869      | 0.446                             | 1.062                      | 0.175                              | 0.377     | -0.1597      | 0.424                             | 0.622                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.735     | -0.2355      | 0.320                             | 1.175                      | 0.200                              | 0.655     | -0.2761      | 0.421                             | 1.048                      | 0.200                              | 0.400     | -0.1744      | 0.435                             | 0.640                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.823     | -0.2527      | 0.307                             | 1.233                      | 0.250                              | 0.707     | -0.2833      | 0.401                             | 1.060                      | 0.250                              | 0.437     | -0.1960      | 0.449                             | 0.654                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.939     | -0.2882      | 0.307                             | 1.314                      | 0.300                              | 0.795     | -0.3280      | 0.413                             | 1.112                      | 0.300                              | 0.458     | -0.2080      | 0.454                             | 0.641                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 1.063     | -0.3589      | 0.338                             | 1.275                      | 0.400                              | 0.958     | -0.4528      | 0.473                             | 1.149                      | 0.400                              | 0.470     | -0.2152      | 0.458                             | 0.563                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | 0.799     | -0.3470      | 0.434                             | 0.539                      | 0.600                              | 0.936     | -0.4498      | 0.481                             | 0.748                      | 0.600                              | 0.499     | -0.2303      | 0.461                             | 0.399                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | 0.696     | -0.3160      | 0.454                             | 0.000                      | 0.800                              | 0.906     | -0.4515      | 0.498                             | 0.362                      | 0.800                              | 0.545     | -0.2589      | 0.475                             | 0.218                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.0000       | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |



TABLE XII.- SECTION COEFFICIENTS FOR THE WING WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $2y/b$  OF 0.175 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued

(b) BVWC;  $\delta = 0.5^\circ$

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| $2y/b$                             | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{x_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ | $2y/b$                             | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{x_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ | $2y/b$                             | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{x_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ | $2y/b$ | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{x_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ | $2y/b$ | $C_{N_W}$ | $C_{m_{LE}}$ | $\left(\frac{x_{cp}}{c}\right)_W$ | $\frac{c}{c_{ov}} C_{N_W}$ |
|------------------------------------|-----------|--------------|-----------------------------------|----------------------------|------------------------------------|-----------|--------------|-----------------------------------|----------------------------|------------------------------------|-----------|--------------|-----------------------------------|----------------------------|--------|-----------|--------------|-----------------------------------|----------------------------|--------|-----------|--------------|-----------------------------------|----------------------------|
| $M = 0.699 \quad \alpha = -0.4.10$ |           |              |                                   |                            | $M = 1.304 \quad \alpha = -0.3.90$ |           |              |                                   |                            | $M = 2.229 \quad \alpha = -0.3.65$ |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | -0.136    | 0.523        | 0.386                             | -0.224                     | 0.175                              | -0.121    | 0.624        | 0.517                             | -0.199                     | 0.175                              | -0.087    | 0.459        | 0.530                             | -0.142                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | -0.148    | 0.559        | 0.378                             | -0.236                     | 0.200                              | -0.130    | 0.630        | 0.485                             | -0.207                     | 0.200                              | -0.085    | 0.412        | 0.487                             | -0.135                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | -0.162    | 0.561        | 0.347                             | -0.242                     | 0.250                              | -0.143    | 0.629        | 0.441                             | -0.213                     | 0.250                              | -0.081    | 0.359        | 0.442                             | -0.121                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | -0.163    | 0.475        | 0.291                             | -0.228                     | 0.300                              | -0.148    | 0.609        | 0.411                             | -0.207                     | 0.300                              | -0.078    | 0.356        | 0.454                             | -0.109                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | -0.192    | 0.484        | 0.252                             | -0.230                     | 0.400                              | -0.177    | 0.639        | 0.362                             | -0.211                     | 0.400                              | -0.094    | 0.363        | 0.385                             | -0.113                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | -0.325    | 0.934        | 0.287                             | -0.260                     | 0.600                              | -0.311    | 1.305        | 0.419                             | -0.248                     | 0.600                              | -0.156    | 0.737        | 0.473                             | -0.124                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | -0.540    | 1.908        | 0.353                             | -0.216                     | 0.800                              | -0.448    | 1.723        | 0.388                             | -0.177                     | 0.800                              | -0.146    | 0.673        | 0.460                             | -0.058                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.700 \quad \alpha = -0.0.05$ |           |              |                                   |                            | $M = 1.301 \quad \alpha = 0.0.15$  |           |              |                                   |                            | $M = 2.233 \quad \alpha = 0.0.35$  |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.016     | -0.022       | 0.787                             | 0.025                      | 0.175                              | 0.006     | -0.0025      | 0.413                             | 0.009                      | 0.175                              | -0.015    | 0.0094       | 0.614                             | -0.025                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.011     | -0.023       | 1.150                             | 0.017                      | 0.200                              | 0.005     | -0.0043      | 0.803                             | 0.008                      | 0.200                              | -0.009    | 0.0049       | 0.549                             | -0.014                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.009     | -0.019       | 1.399                             | 0.013                      | 0.250                              | 0.008     | -0.0080      | 1.005                             | 0.011                      | 0.250                              | -0.003    | 0.0014       | 0.488                             | 0.004                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.018     | -0.0175      | 0.950                             | 0.025                      | 0.300                              | 0.015     | -0.0117      | 0.791                             | 0.020                      | 0.300                              | 0.013     | -0.0041      | 0.310                             | 0.018                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 0.029     | -0.0249      | 0.860                             | 0.034                      | 0.400                              | 0.025     | -0.0203      | 0.807                             | 0.030                      | 0.400                              | 0.016     | -0.0092      | 0.592                             | 0.018                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | -0.057    | 0.325        | 0.574                             | -0.045                     | 0.600                              | -0.051    | 0.410        | 0.808                             | -0.040                     | 0.600                              | -0.012    | 0.132        | 1.144                             | -0.009                     |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | -0.041    | 0.142        | 0.348                             | -0.016                     | 0.800                              | -0.023    | 0.226        | 0.975                             | -0.009                     | 0.800                              | 0.015     | -0.0081      | 0.548                             | 0.005                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.699 \quad \alpha = 0.3.96$  |           |              |                                   |                            | $M = 1.301 \quad \alpha = 0.4.11$  |           |              |                                   |                            | $M = 2.232 \quad \alpha = 0.4.31$  |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.155     | -0.0738      | 0.475                             | 0.256                      | 0.175                              | 0.213     | -0.1029      | 0.483                             | 0.352                      | 0.175                              | 0.073     | -0.0317      | 0.436                             | 0.120                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.165     | -0.0747      | 0.454                             | 0.263                      | 0.200                              | 0.287     | -0.1343      | 0.468                             | 0.459                      | 0.200                              | 0.083     | -0.0371      | 0.447                             | 0.132                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.180     | -0.0763      | 0.423                             | 0.270                      | 0.250                              | 0.311     | -0.1440      | 0.463                             | 0.466                      | 0.250                              | 0.102     | -0.0449      | 0.439                             | 0.153                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.192     | -0.0775      | 0.403                             | 0.269                      | 0.300                              | 0.175     | -0.0847      | 0.485                             | 0.244                      | 0.300                              | 0.120     | -0.0488      | 0.408                             | 0.167                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 0.237     | -0.0902      | 0.381                             | 0.284                      | 0.400                              | 0.213     | -0.0978      | 0.459                             | 0.255                      | 0.400                              | 0.140     | -0.0607      | 0.435                             | 0.167                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | 0.209     | -0.0345      | 0.165                             | 0.167                      | 0.600                              | 0.209     | -0.0560      | 0.268                             | 0.167                      | 0.600                              | 0.156     | -0.0626      | 0.402                             | 0.124                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | 0.413     | -0.1379      | 0.334                             | 0.165                      | 0.800                              | 0.403     | -0.1432      | 0.355                             | 0.161                      | 0.800                              | 0.195     | -0.0889      | 0.456                             | 0.077                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.700 \quad \alpha = 0.7.96$  |           |              |                                   |                            | $M = 1.304 \quad \alpha = 0.8.01$  |           |              |                                   |                            | $M = 2.236 \quad \alpha = 0.8.36$  |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.329     | -0.1385      | 0.421                             | 0.543                      | 0.175                              | 0.276     | -0.1304      | 0.472                             | 0.456                      | 0.175                              | 0.173     | -0.0741      | 0.427                             | 0.286                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.347     | -0.1409      | 0.406                             | 0.555                      | 0.200                              | 0.286     | -0.1339      | 0.468                             | 0.457                      | 0.200                              | 0.187     | -0.0801      | 0.429                             | 0.298                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.371     | -0.1399      | 0.377                             | 0.557                      | 0.250                              | 0.310     | -0.1428      | 0.461                             | 0.464                      | 0.250                              | 0.212     | -0.0902      | 0.426                             | 0.317                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.379     | -0.1315      | 0.347                             | 0.530                      | 0.300                              | 0.341     | -0.1547      | 0.454                             | 0.476                      | 0.300                              | 0.236     | -0.0980      | 0.416                             | 0.329                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 0.463     | -0.1398      | 0.302                             | 0.555                      | 0.400                              | 0.402     | -0.1627      | 0.404                             | 0.482                      | 0.400                              | 0.268     | -0.1195      | 0.445                             | 0.321                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | 0.674     | -0.1955      | 0.290                             | 0.539                      | 0.600                              | 0.554     | -0.2204      | 0.398                             | 0.442                      | 0.600                              | 0.291     | -0.1278      | 0.440                             | 0.232                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | 0.661     | -0.2987      | 0.452                             | 0.264                      | 0.800                              | 0.689     | -0.3251      | 0.472                             | 0.275                      | 0.800                              | 0.339     | -0.1544      | 0.455                             | 0.135                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.698 \quad \alpha = 12.01$   |           |              |                                   |                            | $M = 1.302 \quad \alpha = 12.16$   |           |              |                                   |                            | $M = 2.228 \quad \alpha = 12.41$   |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.514     | -0.1979      | 0.385                             | 0.849                      | 0.175                              | 0.422     | -0.1889      | 0.447                             | 0.698                      | 0.175                              | 0.277     | -0.1180      | 0.426                             | 0.457                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.512     | -0.1873      | 0.366                             | 0.818                      | 0.200                              | 0.443     | -0.1970      | 0.444                             | 0.709                      | 0.200                              | 0.296     | -0.1263      | 0.427                             | 0.473                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.526     | -0.1738      | 0.330                             | 0.789                      | 0.250                              | 0.489     | -0.2121      | 0.434                             | 0.732                      | 0.250                              | 0.330     | -0.1431      | 0.434                             | 0.494                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.565     | -0.1699      | 0.301                             | 0.791                      | 0.300                              | 0.540     | -0.2264      | 0.419                             | 0.756                      | 0.300                              | 0.360     | -0.1605      | 0.446                             | 0.504                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 0.698     | -0.1887      | 0.270                             | 0.837                      | 0.400                              | 0.669     | -0.2814      | 0.420                             | 0.803                      | 0.400                              | 0.376     | -0.1703      | 0.453                             | 0.450                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | 0.746     | -0.2977      | 0.399                             | 0.596                      | 0.600                              | 0.864     | -0.4213      | 0.490                             | 0.688                      | 0.600                              | 0.408     | -0.1861      | 0.456                             | 0.326                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | 0.545     | 0.2377       | 0.436                             | 0.218                      | 0.800                              | 0.864     | -0.1465      | 0.480                             | 0.345                      | 0.800                              | 0.456     | -0.2124      | 0.465                             | 0.182                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| $M = 0.700 \quad \alpha = 15.87$   |           |              |                                   |                            | $M = 1.302 \quad \alpha = 16.12$   |           |              |                                   |                            | $M = 2.232 \quad \alpha = 16.42$   |           |              |                                   |                            |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.175                              | 0.707     | -0.2710      | 0.383                             | 1.168                      | 0.175                              | 0.607     | -0.2815      | 0.464                             | 1.003                      | 0.175                              | 0.368     | -0.1629      | 0.443                             | 0.608                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.200                              | 0.726     | -0.2649      | 0.365                             | 1.161                      | 0.200                              | 0.658     | -0.2858      | 0.448                             | 1.020                      | 0.200                              | 0.396     | -0.1774      | 0.448                             | 0.633                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.250                              | 0.776     | -0.2608      | 0.396                             | 1.164                      | 0.250                              | 0.686     | -0.2967      | 0.426                             | 1.043                      | 0.250                              | 0.436     | -0.1982      | 0.454                             | 0.654                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.300                              | 0.845     | -0.2672      | 0.316                             | 1.183                      | 0.300                              | 0.750     | -0.3107      | 0.414                             | 1.049                      | 0.300                              | 0.457     | -0.2092      | 0.457                             | 0.640                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.400                              | 1.013     | -0.3294      | 0.325                             | 1.215                      | 0.400                              | 0.927     | -0.4274      | 0.461                             | 1.111                      | 0.400                              | 0.470     | -0.2169      | 0.462                             | 0.564                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.600                              | 0.810     | -0.3563      | 0.440                             | 0.647                      | 0.600                              | 0.950     | -0.4577      | 0.482                             | 0.759                      | 0.600                              | 0.503     | -0.2327      | 0.463                             | 0.402                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 0.800                              | 0.716     | -0.3302      | 0.461                             | 0.286                      | 0.800                              | 0.912     | -0.4535      | 0.497                             | 0.364                      | 0.800                              | 0.550     | -0.2611      | 0.475                             | 0.219                      |        |           |              |                                   |                            |        |           |              |                                   |                            |
| 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      | 1.000                              | 0.000     | 0.000        | 0.000                             | 0.000                      |        |           |              |                                   |                            |        |           |              |                                   |                            |



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| 2y/b      | C <sub>NW</sub>     | C <sub>MLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>W</sub> | $\frac{C}{C_{0V}}$ | 2y/b      | C <sub>NW</sub>    | C <sub>MLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>W</sub> | $\frac{C}{C_{0V}}$ | 2y/b      | C <sub>NW</sub>    | C <sub>MLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>W</sub> | $\frac{C}{C_{0V}}$ | 2y/b | C <sub>NW</sub> | C <sub>MLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>W</sub> | $\frac{C}{C_{0V}}$ | 2y/b | C <sub>NW</sub> | C <sub>MLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>W</sub> | $\frac{C}{C_{0V}}$ | 2y/b | C <sub>NW</sub> | C <sub>MLE</sub> | ( $\frac{\chi_{cp}}{C}$ ) <sub>W</sub> | $\frac{C}{C_{0V}}$ |  |
|-----------|---------------------|------------------|----------------------------------------|--------------------|-----------|--------------------|------------------|----------------------------------------|--------------------|-----------|--------------------|------------------|----------------------------------------|--------------------|------|-----------------|------------------|----------------------------------------|--------------------|------|-----------------|------------------|----------------------------------------|--------------------|------|-----------------|------------------|----------------------------------------|--------------------|--|
| M = 0.700 | $\alpha = -0.40.00$ |                  |                                        |                    | M = 1.300 | $\alpha = -0.3.81$ |                  |                                        |                    | M = 2.227 | $\alpha = -0.3.56$ |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.175     | -0.147              | 0.0486           | 0.330                                  | -0.243             | 0.175     | -0.136             | 0.0567           | 0.416                                  | -0.225             | 0.175     | -0.102             | 0.0443           | 0.434                                  | -0.168             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.200     | -0.168              | 0.0532           | 0.316                                  | -0.268             | 0.200     | -0.154             | 0.0621           | 0.404                                  | -0.245             | 0.200     | -0.100             | 0.0391           | 0.389                                  | -0.160             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.250     | -0.188              | 0.0554           | 0.294                                  | -0.282             | 0.250     | -0.172             | 0.0665           | 0.387                                  | -0.257             | 0.250     | -0.097             | 0.0340           | 0.352                                  | -0.144             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.300     | -0.181              | 0.0485           | 0.267                                  | -0.253             | 0.300     | -0.169             | 0.0629           | 0.372                                  | -0.237             | 0.300     | -0.091             | 0.0358           | 0.392                                  | -0.127             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.400     | -0.197              | 0.0480           | 0.244                                  | -0.236             | 0.400     | -0.187             | 0.0651           | 0.348                                  | -0.224             | 0.400     | -0.099             | 0.0364           | 0.367                                  | -0.119             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.600     | -0.318              | 0.0921           | 0.290                                  | -0.254             | 0.600     | -0.313             | 0.1319           | 0.422                                  | -0.250             | 0.600     | -0.156             | 0.0776           | 0.498                                  | -0.124             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.800     | -0.521              | 0.1745           | 0.335                                  | -0.208             | 0.800     | -0.439             | 0.1688           | 0.335                                  | -0.175             | 0.800     | -0.143             | 0.0646           | 0.51                                   | -0.057             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 1.000     | 0.000               | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| M = 0.698 | $\alpha =$          |                  |                                        |                    | M = 1.302 | $\alpha = 00.10$   |                  |                                        |                    | M = 2.231 | $\alpha = 00.40$   |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.175     | 0.014               | -0.0220          | 1.543                                  | 0.023              | 0.175     | -0.023             | -0.0022          | -0.096                                 | -0.037             | 0.175     | -0.027             | 0.0024           | 0.086                                  | -0.045             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.200     | -0.013              | -0.0186          | -1.438                                 | -0.020             | 0.200     | -0.036             | -0.0015          | -0.041                                 | -0.057             | 0.200     | -0.032             | 0.0010           | 0.031                                  | -0.051             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.250     | -0.029              | -0.0161          | -0.564                                 | -0.042             | 0.250     | -0.039             | -0.0018          | -0.046                                 | -0.059             | 0.250     | -0.026             | -0.0016          | -0.062                                 | -0.039             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.300     | 0.006               | -0.0191          | -0.113                                 | -0.008             | 0.300     | -0.013             | -0.0046          | -0.017                                 | -0.004             | 0.300     | -0.002             | -0.0042          | -0.284                                 | -0.002             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.400     | -0.027              | -0.0247          | 0.913                                  | 0.032              | 0.400     | 0.005              | 0.0076           | 1.510                                  | 0.006              | 0.400     | 0.013              | -0.0094          | 0.723                                  | 0.015              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.600     | -0.051              | 0.0312           | 0.613                                  | -0.040             | 0.600     | 0.065              | 0.0524           | 0.801                                  | -0.052             | 0.600     | -0.012             | 0.151            | 1.256                                  | -0.009             |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.800     | -0.036              | 0.0139           | 0.382                                  | -0.014             | 0.800     | -0.036             | 0.0318           | 0.889                                  | -0.014             | 0.800     | 0.024              | -0.0095          | 0.394                                  | 0.009              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 1.000     | 0.000               | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| M = 0.697 | $\alpha = 03.91$    |                  |                                        |                    | M = 1.302 | $\alpha = 04.01$   |                  |                                        |                    | M = 2.231 | $\alpha = 04.26$   |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.175     | -0.004              | -0.0572          | 0.000                                  | -0.006             | 0.175     | 0.019              | -0.0499          | 2.646                                  | 0.031              | 0.175     | 0.031              | -0.270           | 0.881                                  | 0.050              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.200     | 0.044               | -0.0638          | 1.460                                  | 0.069              | 0.200     | 0.025              | -0.0521          | 2.062                                  | 0.040              | 0.200     | 0.040              | -0.342           | 0.857                                  | 0.063              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.250     | 0.124               | -0.0746          | 0.603                                  | 0.185              | 0.250     | 0.070              | -0.0616          | 0.878                                  | 0.105              | 0.250     | 0.065              | -0.436           | 0.673                                  | 0.097              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.300     | 0.185               | -0.0823          | 0.444                                  | 0.259              | 0.300     | 0.158              | -0.0781          | 0.494                                  | 0.221              | 0.300     | 0.099              | -0.469           | 0.474                                  | 0.138              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.400     | 0.237               | -0.0890          | 0.376                                  | 0.283              | 0.400     | 0.195              | -0.0813          | 0.417                                  | 0.234              | 0.400     | 0.136              | -0.600           | 0.441                                  | 0.163              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.600     | 0.214               | -0.0355          | 0.166                                  | 0.171              | 0.600     | 0.195              | -0.0405          | 0.208                                  | 0.156              | 0.600     | 0.145              | -0.0560          | 0.387                                  | 0.115              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.800     | 0.416               | -1.363           | 0.328                                  | 0.166              | 0.800     | 0.392              | -1.351           | 0.345                                  | 0.156              | 0.800     | 0.191              | -0.8868          | 0.454                                  | 0.076              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 1.000     | 0.000               | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| M = 0.699 | $\alpha = 07.96$    |                  |                                        |                    | M = 1.301 | $\alpha = 08.06$   |                  |                                        |                    | M = 2.243 | $\alpha = 08.31$   |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.175     | 0.157               | -0.0584          | 0.371                                  | 0.260              | 0.175     | 0.264              | -1.355           | 0.513                                  | 0.435              | 0.175     | 0.149              | -0.680           | 0.456                                  | 0.246              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.200     | 0.279               | -0.1029          | 0.368                                  | 0.446              | 0.200     | 0.275              | -1.354           | 0.493                                  | 0.439              | 0.200     | 0.165              | -0.763           | 0.461                                  | 0.264              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.250     | 0.450               | -0.1715          | 0.381                                  | 0.675              | 0.250     | 0.299              | -1.393           | 0.466                                  | 0.448              | 0.250     | 0.193              | -0.871           | 0.451                                  | 0.289              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.300     | 0.531               | -0.2152          | 0.405                                  | 0.743              | 0.300     | 0.328              | -1.484           | 0.453                                  | 0.458              | 0.300     | 0.216              | -0.906           | 0.420                                  | 0.301              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.400     | 0.397               | -0.1286          | 0.324                                  | 0.440              | 0.400     | 0.388              | -1.564           | 0.403                                  | 0.465              | 0.400     | 0.252              | -1.126           | 0.446                                  | 0.365              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.600     | 0.625               | -0.2061          | 0.500                                  | 0.500              | 0.600     | 0.504              | -2.581           | 0.462                                  | 0.584              | 0.600     | 0.278              | -1.220           | 0.438                                  | 0.222              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.800     | 0.660               | -0.2807          | 0.425                                  | 0.264              | 0.800     | 0.670              | -3.096           | 0.462                                  | 0.267              | 0.800     | 0.327              | -1.487           | 0.454                                  | 0.130              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 1.000     | 0.000               | -0.0000          | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| M = 0.699 | $\alpha = 11.96$    |                  |                                        |                    | M = 1.300 | $\alpha = 12.06$   |                  |                                        |                    | M = 2.235 | $\alpha = 12.36$   |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.175     | 0.496               | -1.8883          | 0.379                                  | 0.820              | 0.175     | 0.425              | -1.964           | 0.463                                  | 0.701              | 0.175     | 0.255              | -1.082           | 0.424                                  | 0.421              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.200     | 0.501               | -1.8888          | 0.377                                  | 0.801              | 0.200     | 0.467              | -1.985           | 0.477                                  | 0.361              | 0.200     | 0.277              | -1.191           | 0.431                                  | 0.442              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.250     | 0.520               | -1.8390          | 0.352                                  | 0.779              | 0.250     | 0.467              | -2.066           | 0.441                                  | 0.700              | 0.250     | 0.311              | -1.367           | 0.439                                  | 0.467              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.300     | 0.552               | -1.6882          | 0.305                                  | 0.772              | 0.300     | 0.510              | -2.184           | 0.428                                  | 0.714              | 0.300     | 0.337              | -1.492           | 0.443                                  | 0.471              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.400     | 0.683               | -1.805           | 0.265                                  | 0.819              | 0.400     | 0.650              | -2.711           | 0.417                                  | 0.779              | 0.400     | 0.357              | -1.620           | 0.454                                  | 0.427              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.600     | 0.830               | -3.315           | 0.399                                  | 0.664              | 0.600     | 0.861              | -4.215           | 0.489                                  | 0.688              | 0.600     | 0.388              | -1.758           | 0.453                                  | 0.310              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.800     | 0.592               | -2.544           | 0.430                                  | 0.236              | 0.800     | 0.858              | -4.101           | 0.478                                  | 0.343              | 0.800     | 0.438              | -2.039           | 0.465                                  | 0.175              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 1.000     | 0.000               | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| M = 0.698 | $\alpha = 16.02$    |                  |                                        |                    | M = 1.299 | $\alpha = 16.07$   |                  |                                        |                    | M = 2.235 | $\alpha = 16.42$   |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.175     | 0.728               | -2.646           | 0.363                                  | 1.202              | 0.175     | 0.628              | -3.090           | 0.492                                  | 1.038              | 0.175     | 0.373              | -1.606           | 0.431                                  | 0.615              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.200     | 0.758               | -2.658           | 0.351                                  | 1.212              | 0.200     | 0.637              | -2.941           | 0.462                                  | 1.018              | 0.200     | 0.395              | -1.743           | 0.442                                  | 0.631              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.250     | 0.818               | -2.686           | 0.328                                  | 1.226              | 0.250     | 0.672              | -2.865           | 0.426                                  | 1.008              | 0.250     | 0.427              | -1.935           | 0.454                                  | 0.640              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.300     | 0.879               | -2.719           | 0.309                                  | 1.230              | 0.300     | 0.734              | -3.078           | 0.419                                  | 1.028              | 0.300     | 0.444              | -2.025           | 0.456                                  | 0.621              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.400     | 1.034               | -3.269           | 0.316                                  | 1.240              | 0.400     | 0.904              | -4.138           | 0.458                                  | 1.084              | 0.400     | 0.459              | -2.117           | 0.461                                  | 0.551              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.600     | 0.805               | -3.459           | 0.430                                  | 0.643              | 0.600     | 0.946              | -4.574           | 0.483                                  | 0.775              | 0.600     | 0.493              | -2.281           | 0.463                                  | 0.394              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 0.800     | 0.729               | -3.435           | 0.400                                  | 0.291              | 0.800     | 1.291              | -5.521           | 0.495                                  | 0.367              | 0.800     | 0.540              | -2.566           | 0.475                                  | 0.216              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |
| 1.000     | 0.000               | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              | 1.000     | 0.000              | 0.0000           | 0.000                                  | 0.000              |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |      |                 |                  |                                        |                    |  |



TABLE XIII.- SECTION COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $y/b$  OF 0.011 AND 1.0 WERE OBTAINED BY EXTRAPOLATION  
(a) BVW

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| $y/b$                             | $C_{Y_V}$ | $C_{N_{LE}}$ | $(\frac{x_{cp}}{c})_V$ | $\frac{c}{C_{OV}} C_{Y_V}$ | $y/b$                             | $C_{Y_V}$ | $C_{N_{LE}}$ | $(\frac{x_{cp}}{c})_V$ | $\frac{c}{C_{OV}} C_{Y_V}$ | $y/b$                             | $C_{Y_V}$ | $C_{N_{LE}}$ | $(\frac{x_{cp}}{c})_V$ | $\frac{c}{C_{OV}} C_{Y_V}$ | $y/b$ | $C_{Y_V}$ | $C_{N_{LE}}$ | $(\frac{x_{cp}}{c})_V$ | $\frac{c}{C_{OV}} C_{Y_V}$ | $y/b$ | $C_{Y_V}$ | $C_{N_{LE}}$ | $(\frac{x_{cp}}{c})_V$ | $\frac{c}{C_{OV}} C_{Y_V}$ |
|-----------------------------------|-----------|--------------|------------------------|----------------------------|-----------------------------------|-----------|--------------|------------------------|----------------------------|-----------------------------------|-----------|--------------|------------------------|----------------------------|-------|-----------|--------------|------------------------|----------------------------|-------|-----------|--------------|------------------------|----------------------------|
| $M = 0.700 \quad \alpha = -04.15$ |           |              |                        |                            | $M = 1.302 \quad \alpha = -03.90$ |           |              |                        |                            | $M = 2.228 \quad \alpha = -03.75$ |           |              |                        |                            |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.011                             | -0.137    | .1070        | 0.782                  | -0.211                     | 0.011                             | -0.132    | .0592        | 0.447                  | -0.204                     | 0.011                             | -0.129    | .0875        | 0.680                  | -0.198                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.150                             | -0.200    | .0651        | 0.326                  | -0.279                     | 0.150                             | -0.163    | .0471        | 0.290                  | -0.227                     | 0.150                             | -0.106    | .0448        | 0.421                  | -0.148                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.300                             | -0.247    | .0481        | 0.195                  | -0.303                     | 0.300                             | -0.187    | .0405        | 0.217                  | -0.228                     | 0.300                             | -0.113    | .0353        | 0.313                  | -0.138                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.450                             | -0.273    | .0603        | 0.221                  | -0.288                     | 0.450                             | -0.201    | .0406        | 0.202                  | -0.212                     | 0.450                             | -0.151    | .0637        | 0.423                  | -0.159                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.600                             | -0.302    | .0690        | 0.228                  | -0.267                     | 0.600                             | -0.246    | .0604        | 0.246                  | -0.218                     | 0.600                             | -0.146    | .0585        | 0.401                  | -0.129                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.750                             | -0.345    | .1149        | 0.333                  | -0.246                     | 0.750                             | -0.184    | -.0015       | -0.008                 | -0.131                     | 0.750                             | -0.156    | .0746        | 0.479                  | -0.111                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      |       |           |              |                        |                            |       |           |              |                        |                            |
| $M = 0.700 \quad \alpha = -00.05$ |           |              |                        |                            | $M = 1.304 \quad \alpha = -00.05$ |           |              |                        |                            | $M = 2.232 \quad \alpha = 00.30$  |           |              |                        |                            |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.011                             | -0.090    | .0545        | 0.604                  | -0.139                     | 0.011                             | -0.065    | .0124        | 0.190                  | -0.100                     | 0.011                             | -0.105    | .0841        | 0.803                  | -0.161                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.150                             | -0.106    | .0314        | 0.296                  | -0.148                     | 0.150                             | -0.081    | .0132        | 0.163                  | -0.113                     | 0.150                             | -0.062    | .0307        | 0.493                  | -0.087                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.300                             | -0.131    | .0234        | 0.178                  | -0.161                     | 0.300                             | -0.104    | .0194        | 0.188                  | -0.127                     | 0.300                             | -0.057    | .0133        | 0.235                  | -0.069                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.450                             | -0.165    | .0331        | 0.201                  | -0.174                     | 0.450                             | -0.131    | .0311        | 0.238                  | -0.138                     | 0.450                             | -0.093    | .0376        | 0.406                  | -0.097                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.600                             | -0.187    | .0473        | 0.253                  | -0.165                     | 0.600                             | -0.164    | .0484        | 0.295                  | -0.145                     | 0.600                             | -0.096    | .0385        | 0.402                  | -0.084                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.750                             | -0.237    | .0842        | 0.355                  | -0.169                     | 0.750                             | -0.284    | .1599        | 0.564                  | -0.202                     | 0.750                             | -0.134    | .0776        | 0.577                  | -0.096                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      |       |           |              |                        |                            |       |           |              |                        |                            |
| $M = 0.698 \quad \alpha = 03.91$  |           |              |                        |                            | $M = 1.303 \quad \alpha = 04.11$  |           |              |                        |                            | $M = 2.232 \quad \alpha = 04.36$  |           |              |                        |                            |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.011                             | -0.035    | .0421        | 1.221                  | -0.053                     | 0.011                             | 0.009     | -.0419       | 4.905                  | 0.013                      | 0.011                             | -0.022    | .0143        | 0.635                  | -0.034                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.150                             | -0.059    | .0246        | 0.414                  | -0.083                     | 0.150                             | -0.034    | .0023        | 0.069                  | -0.047                     | 0.150                             | -0.028    | .0156        | 0.560                  | -0.038                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.300                             | -0.077    | .0151        | 0.196                  | -0.094                     | 0.300                             | -0.057    | .0225        | 0.392                  | -0.070                     | 0.300                             | -0.034    | .0162        | 0.471                  | -0.042                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.450                             | -0.084    | .0154        | 0.182                  | -0.089                     | 0.450                             | -0.057    | .0141        | 0.245                  | -0.060                     | 0.450                             | -0.042    | .0160        | 0.383                  | -0.044                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.600                             | -0.098    | .0272        | 0.276                  | -0.087                     | 0.600                             | -0.085    | .0326        | 0.384                  | -0.075                     | 0.600                             | -0.049    | .0188        | 0.386                  | -0.043                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.750                             | -0.152    | .0705        | 0.465                  | -0.108                     | 0.750                             | -0.201    | .1378        | 0.687                  | -0.143                     | 0.750                             | -0.140    | .1041        | 0.742                  | -0.100                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      |       |           |              |                        |                            |       |           |              |                        |                            |
| $M = 0.700 \quad \alpha = 07.96$  |           |              |                        |                            | $M = 1.302 \quad \alpha = 08.11$  |           |              |                        |                            | $M = 2.229 \quad \alpha = 08.31$  |           |              |                        |                            |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.011                             | -0.049    | .0320        | 0.654                  | -0.075                     | 0.011                             | -0.061    | -.0122       | -0.199                 | -0.094                     | 0.011                             | -0.026    | .0001        | 0.003                  | -0.039                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.150                             | -0.103    | .0296        | 0.288                  | -0.143                     | 0.150                             | -0.068    | .0140        | 0.205                  | -0.095                     | 0.150                             | -0.032    | .0203        | 0.626                  | -0.045                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.300                             | -0.118    | .0264        | 0.223                  | -0.144                     | 0.300                             | -0.060    | .0212        | 0.357                  | -0.073                     | 0.300                             | -0.015    | .0133        | 0.865                  | -0.018                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.450                             | -0.090    | .0226        | 0.251                  | -0.095                     | 0.450                             | -0.033    | .0066        | 0.198                  | -0.035                     | 0.450                             | 0.027     | -.0235       | 0.881                  | 0.028                      |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.600                             | -0.074    | .0225        | 0.303                  | -0.065                     | 0.600                             | -0.037    | .0121        | 0.322                  | -0.033                     | 0.600                             | -0.006    | .0037        | 0.628                  | -0.005                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.750                             | -0.118    | .0694        | 0.588                  | -0.084                     | 0.750                             | -0.046    | .0234        | 0.506                  | -0.033                     | 0.750                             | -0.129    | .1055        | 0.815                  | -0.092                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      |       |           |              |                        |                            |       |           |              |                        |                            |
| $M = 0.697 \quad \alpha = 11.96$  |           |              |                        |                            | $M = 1.302 \quad \alpha = 12.21$  |           |              |                        |                            | $M = 2.232 \quad \alpha = 12.41$  |           |              |                        |                            |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.011                             | -0.536    | .1779        | 0.332                  | -0.827                     | 0.011                             | -0.454    | .0956        | 0.211                  | -0.701                     | 0.011                             | -0.102    | .0685        | 0.668                  | -0.158                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.150                             | -0.347    | .0976        | 0.281                  | -0.486                     | 0.150                             | -0.293    | .1038        | 0.354                  | -0.410                     | 0.150                             | -0.025    | .0163        | 0.659                  | -0.034                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.300                             | -0.208    | .0464        | 0.223                  | -0.255                     | 0.300                             | -0.137    | .0666        | 0.486                  | -0.168                     | 0.300                             | 0.018     | -.0064       | 0.361                  | 0.021                      |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.450                             | -0.136    | .0319        | 0.235                  | -0.143                     | 0.450                             | 0.002     | -.0185       | 0.000                  | 0.001                      | 0.450                             | 0.017     | .0059        | -0.350                 | 0.017                      |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.600                             | -0.062    | .0179        | 0.288                  | -0.055                     | 0.600                             | 0.057     | -.0443       | 0.776                  | 0.050                      | 0.600                             | 0.033     | -.0060       | 0.178                  | 0.029                      |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.750                             | -0.078    | .0620        | 0.794                  | -0.055                     | 0.750                             | -0.134    | .1492        | 1.112                  | -0.095                     | 0.750                             | -0.284    | .2878        | 1.014                  | -0.203                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      |       |           |              |                        |                            |       |           |              |                        |                            |
| $M = 0.699 \quad \alpha = 15.87$  |           |              |                        |                            | $M = 1.300 \quad \alpha = 16.07$  |           |              |                        |                            | $M = 2.232 \quad \alpha = 16.32$  |           |              |                        |                            |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.011                             | -0.581    | .2464        | 0.424                  | -0.897                     | 0.011                             | -1.017    | .5663        | 0.557                  | -1.570                     | 0.011                             | -0.438    | .3210        | 0.732                  | -0.676                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.150                             | -0.459    | .1952        | 0.426                  | -0.641                     | 0.150                             | -0.547    | .3412        | 0.624                  | -0.765                     | 0.150                             | -0.131    | .0958        | 0.729                  | -0.183                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.300                             | -0.338    | .1408        | 0.416                  | -0.415                     | 0.300                             | -0.202    | .1341        | 0.663                  | -0.248                     | 0.300                             | 0.029     | -.0153       | 0.528                  | 0.035                      |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.450                             | -0.230    | .0872        | 0.379                  | -0.243                     | 0.450                             | -0.026    | -.0358       | -1.387                 | -0.027                     | 0.450                             | 0.012     | .0106        | -0.885                 | 0.012                      |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.600                             | -0.145    | .0527        | 0.363                  | -0.128                     | 0.600                             | 0.003     | .0032        | -1.241                 | 0.002                      | 0.600                             | 0.010     | .0209        | -2.195                 | 0.008                      |       |           |              |                        |                            |       |           |              |                        |                            |
| 0.750                             | -0.096    | .0775        | 0.805                  | -0.068                     | 0.750                             | -0.011    | .0464        | 4.178                  | -0.007                     | 0.750                             | -0.261    | .2785        | 1.069                  | -0.186                     |       |           |              |                        |                            |       |           |              |                        |                            |
| 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      | 1.000                             | 0.000     | .0000        | 0.000                  | 0.000                      |       |           |              |                        |                            |       |           |              |                        |                            |



TABLE XIII.- SECTION COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $y/b$  OF 0.011 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Continued  
(b) BVWC;  $\delta = 0.5^\circ$

| $y/b$                       | $C_{YV}$ | $C_{NLE}$ | $\frac{(X_{cp})}{(C)}_V$ | $\frac{C}{C_{OV}} C_{YV}$ | $y/b$                       | $C_{YV}$ | $C_{NLE}$ | $\frac{(X_{cp})}{(C)}_V$ | $\frac{C}{C_{OV}} C_{YV}$ | $y/b$                       | $C_{YV}$ | $C_{NLE}$ | $\frac{(X_{cp})}{(C)}_V$ | $\frac{C}{C_{OV}} C_{YV}$ | $y/b$ | $C_{YV}$ | $C_{NLE}$ | $\frac{(X_{cp})}{(C)}_V$ | $\frac{C}{C_{OV}} C_{YV}$ | $y/b$ | $C_{YV}$ | $C_{NLE}$ | $\frac{(X_{cp})}{(C)}_V$ | $\frac{C}{C_{OV}} C_{YV}$ |
|-----------------------------|----------|-----------|--------------------------|---------------------------|-----------------------------|----------|-----------|--------------------------|---------------------------|-----------------------------|----------|-----------|--------------------------|---------------------------|-------|----------|-----------|--------------------------|---------------------------|-------|----------|-----------|--------------------------|---------------------------|
| M = 0.699 $\alpha = -04.10$ |          |           |                          |                           | M = 1.304 $\alpha = -03.90$ |          |           |                          |                           | M = 2.229 $\alpha = -03.65$ |          |           |                          |                           |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.011                       | -0.178   | 0.054     | 0.536                    | -0.274                    | 0.011                       | 0.006    | -0.0864   | 0.000                    | 0.009                     | 0.011                       | -0.133   | 0.0803    | 0.606                    | -0.204                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.150                       | -0.200   | 0.0588    | 0.299                    | -0.279                    | 0.150                       | -0.102   | -0.0075   | -0.074                   | -0.142                    | 0.150                       | -0.110   | 0.0462    | 0.420                    | -0.154                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.300                       | -0.229   | 0.0435    | 0.190                    | -0.281                    | 0.300                       | -0.180   | 0.0393    | 0.218                    | -0.220                    | 0.300                       | -0.112   | 0.0367    | 0.327                    | -0.137                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.450                       | -0.265   | 0.0531    | 0.200                    | -0.280                    | 0.450                       | -0.219   | 0.0464    | 0.212                    | -0.231                    | 0.450                       | -0.142   | 0.0556    | 0.393                    | -0.149                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.600                       | -0.328   | 0.0800    | 0.244                    | -0.290                    | 0.600                       | -0.257   | 0.0657    | 0.256                    | -0.227                    | 0.600                       | -0.149   | 0.0617    | 0.415                    | -0.131                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.750                       | -0.349   | 0.1105    | 0.317                    | -0.249                    | 0.750                       | -0.316   | 0.1210    | 0.383                    | -0.226                    | 0.750                       | -0.207   | 0.1226    | 0.593                    | -0.147                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     |       |          |           |                          |                           |       |          |           |                          |                           |
| M = 0.700 $\alpha = -00.05$ |          |           |                          |                           | M = 1.301 $\alpha = 00.15$  |          |           |                          |                           | M = 2.233 $\alpha = 00.35$  |          |           |                          |                           |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.011                       | -0.021   | 0.0109    | 0.518                    | -0.032                    | 0.011                       | -0.019   | -0.0361   | -1.910                   | -0.029                    | 0.011                       | -0.007   | -0.0089   | -1.302                   | -0.010                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.150                       | -0.106   | 0.0328    | 0.309                    | -0.148                    | 0.150                       | -0.064   | -0.0013   | -0.021                   | -0.089                    | 0.150                       | -0.064   | 0.0276    | 0.430                    | -0.089                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.300                       | -0.154   | 0.0389    | 0.252                    | -0.189                    | 0.300                       | -0.111   | 0.0265    | 0.240                    | -0.135                    | 0.300                       | -0.062   | 0.0170    | 0.276                    | -0.075                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.450                       | -0.156   | 0.0266    | 0.170                    | -0.165                    | 0.450                       | -0.155   | 0.0444    | 0.286                    | -0.163                    | 0.450                       | 0.007    | -0.0453   | 0.194                    | 0.007                     |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.600                       | -0.200   | 0.0486    | 0.242                    | -0.177                    | 0.600                       | -0.166   | 0.0491    | 0.296                    | -0.146                    | 0.600                       | -0.105   | 0.0449    | 0.429                    | -0.092                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.750                       | -0.255   | 0.0967    | 0.379                    | -0.182                    | 0.750                       | -0.293   | 0.1694    | 0.577                    | -0.209                    | 0.750                       | -0.136   | 0.0751    | 0.551                    | -0.097                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     |       |          |           |                          |                           |       |          |           |                          |                           |
| M = 0.699 $\alpha = 03.96$  |          |           |                          |                           | M = 1.301 $\alpha = 04.11$  |          |           |                          |                           | M = 2.232 $\alpha = 04.31$  |          |           |                          |                           |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.011                       | -0.260   | 0.1044    | 0.401                    | -0.401                    | 0.011                       | -0.270   | 0.1058    | 0.391                    | -0.417                    | 0.011                       | -0.168   | 0.0960    | 0.570                    | -0.259                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.150                       | -0.132   | 0.0355    | 0.269                    | -0.184                    | 0.150                       | -0.122   | 0.0223    | 0.183                    | -0.170                    | 0.150                       | -0.088   | 0.0397    | 0.451                    | -0.123                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.300                       | -0.068   | 0.0031    | 0.045                    | -0.083                    | 0.300                       | -0.053   | -0.0076   | -0.144                   | -0.064                    | 0.300                       | -0.037   | 0.0053    | 0.144                    | -0.045                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.450                       | -0.083   | 0.0144    | 0.174                    | -0.087                    | 0.450                       | -0.079   | 0.0250    | 0.318                    | -0.083                    | 0.450                       | -0.022   | -0.0017   | -0.078                   | -0.023                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.600                       | -0.096   | 0.0233    | 0.244                    | -0.084                    | 0.600                       | -0.107   | 0.0461    | 0.431                    | -0.094                    | 0.600                       | -0.049   | 0.0236    | 0.478                    | -0.043                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.750                       | -0.145   | 0.0680    | 0.468                    | -0.104                    | 0.750                       | -0.088   | 0.0286    | 0.325                    | -0.063                    | 0.750                       | -0.153   | 0.1221    | 0.797                    | -0.109                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     |       |          |           |                          |                           |       |          |           |                          |                           |
| M = 0.700 $\alpha = 07.96$  |          |           |                          |                           | M = 1.304 $\alpha = 08.01$  |          |           |                          |                           | M = 2.236 $\alpha = 08.36$  |          |           |                          |                           |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.011                       | -0.171   | 0.1262    | 0.740                    | -0.263                    | 0.011                       | -0.167   | 0.1362    | 0.814                    | -0.258                    | 0.011                       | -0.074   | 0.0196    | 0.264                    | -0.114                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.150                       | -0.287   | 0.0860    | 0.299                    | -0.401                    | 0.150                       | -0.185   | 0.0635    | 0.343                    | -0.258                    | 0.150                       | -0.087   | 0.0360    | 0.411                    | -0.122                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.300                       | -0.281   | 0.0471    | 0.168                    | -0.344                    | 0.300                       | -0.154   | 0.0146    | 0.095                    | -0.188                    | 0.300                       | -0.076   | 0.0328    | 0.431                    | -0.093                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.450                       | -0.136   | 0.0129    | 0.095                    | -0.143                    | 0.450                       | -0.070   | -0.0035   | -0.050                   | -0.073                    | 0.450                       | -0.038   | 0.0081    | 0.213                    | -0.040                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.600                       | -0.069   | 0.0142    | 0.204                    | -0.061                    | 0.600                       | -0.073   | 0.0362    | 0.493                    | -0.065                    | 0.600                       | -0.019   | 0.0109    | 0.579                    | -0.016                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.750                       | -0.096   | 0.0551    | 0.573                    | -0.068                    | 0.750                       | -0.046   | 0.0361    | 0.783                    | -0.033                    | 0.750                       | -0.129   | 0.1113    | 0.861                    | -0.092                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     |       |          |           |                          |                           |       |          |           |                          |                           |
| M = 0.698 $\alpha = 12.01$  |          |           |                          |                           | M = 1.302 $\alpha = 12.16$  |          |           |                          |                           | M = 2.228 $\alpha = 12.41$  |          |           |                          |                           |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.011                       | -0.434   | 0.0710    | 0.164                    | -0.669                    | 0.011                       | -0.184   | 0.0155    | 0.084                    | -0.283                    | 0.011                       | -0.127   | 0.0934    | 0.736                    | -0.195                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.150                       | -0.564   | 0.1359    | 0.241                    | -0.788                    | 0.150                       | -0.277   | 0.027     | 0.371                    | -0.387                    | 0.150                       | -0.086   | 0.0555    | 0.644                    | -0.120                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.300                       | -0.554   | 0.1500    | 0.271                    | -0.679                    | 0.300                       | -0.306   | 0.1439    | 0.471                    | -0.375                    | 0.300                       | -0.051   | 0.0255    | 0.497                    | -0.062                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.450                       | -0.388   | 0.1059    | 0.273                    | -0.410                    | 0.450                       | -0.260   | 0.1300    | 0.499                    | -0.275                    | 0.450                       | -0.026   | 0.0069    | 0.266                    | -0.027                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.600                       | -0.144   | 0.0183    | 0.127                    | -0.128                    | 0.600                       | -0.128   | 0.0506    | 0.394                    | -0.113                    | 0.600                       | -0.036   | 0.0171    | 0.471                    | -0.032                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.750                       | -0.057   | 0.0222    | 0.389                    | -0.040                    | 0.750                       | -0.026   | 0.0248    | 0.948                    | -0.018                    | 0.750                       | -0.141   | 0.1285    | 0.908                    | -0.101                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     |       |          |           |                          |                           |       |          |           |                          |                           |
| M = 0.700 $\alpha = 15.87$  |          |           |                          |                           | M = 1.302 $\alpha = 16.12$  |          |           |                          |                           | M = 2.232 $\alpha = 16.42$  |          |           |                          |                           |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.011                       | -1.118   | 0.4467    | 0.400                    | -1.726                    | 0.011                       | -0.847   | 0.4238    | 0.500                    | -1.307                    | 0.011                       | -0.109   | 0.0735    | 0.674                    | -0.168                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.150                       | -0.815   | 0.2865    | 0.352                    | -1.139                    | 0.150                       | -0.519   | 0.2515    | 0.485                    | -0.725                    | 0.150                       | -0.033   | 0.0213    | 0.639                    | -0.046                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.300                       | -0.579   | 0.1714    | 0.296                    | -0.710                    | 0.300                       | -0.281   | 0.1251    | 0.446                    | -0.344                    | 0.300                       | 0.009    | -0.0078   | 0.836                    | 0.011                     |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.450                       | -0.440   | 0.1163    | 0.265                    | -0.464                    | 0.450                       | -0.163   | 0.0603    | 0.370                    | -0.172                    | 0.450                       | 0.011    | -0.0086   | 0.752                    | 0.012                     |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.600                       | -0.312   | 0.0818    | 0.262                    | -0.276                    | 0.600                       | -0.157   | 0.0722    | 0.460                    | -0.139                    | 0.600                       | 0.003    | 0.0045    | -1.526                   | 0.002                     |       |          |           |                          |                           |       |          |           |                          |                           |
| 0.750                       | -0.124   | 0.0422    | 0.341                    | -0.088                    | 0.750                       | 0.023    | -0.0476   | 2.031                    | 0.016                     | 0.750                       | -0.254   | 0.2406    | 0.947                    | -0.181                    |       |          |           |                          |                           |       |          |           |                          |                           |
| 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     | 1.000                       | 0.000    | 0.0000    | 0.000                    | 0.000                     |       |          |           |                          |                           |       |          |           |                          |                           |



TABLE XIII.- SECTION COEFFICIENTS FOR THE VERTICAL TAIL WITH THE MODEL AT  $5.3^\circ$  SIDESLIP. VALUES FOR  $y/b$  OF 0.011 AND 1.0 WERE OBTAINED BY EXTRAPOLATION - Concluded  
(c) BVWC;  $\delta = 10.7^\circ$

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| $y/b$                       | $C_{YV}$ | $C_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{C_{C_{YV}}}{C_{OV}}$ | $y/b$                       | $C_{YV}$ | $C_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{C_{C_{YV}}}{C_{OV}}$ | $y/b$                       | $C_{YV}$ | $C_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{C_{C_{YV}}}{C_{OV}}$ | $y/b$ | $C_{YV}$ | $C_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{C_{C_{YV}}}{C_{OV}}$ | $y/b$ | $C_{YV}$ | $C_{NLE}$ | $\left(\frac{x_{cp}}{c}\right)_V$ | $\frac{C_{C_{YV}}}{C_{OV}}$ |
|-----------------------------|----------|-----------|-----------------------------------|-----------------------------|-----------------------------|----------|-----------|-----------------------------------|-----------------------------|-----------------------------|----------|-----------|-----------------------------------|-----------------------------|-------|----------|-----------|-----------------------------------|-----------------------------|-------|----------|-----------|-----------------------------------|-----------------------------|
| M = 0.700 $\alpha = -04.00$ |          |           |                                   |                             | M = 1.300 $\alpha = -03.81$ |          |           |                                   |                             | M = 2.227 $\alpha = -03.56$ |          |           |                                   |                             |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.011                       | -0.107   | .0533     | 0.499                             | -0.165                      | 0.011                       | -0.156   | .0581     | 0.372                             | -0.241                      | 0.011                       | -0.112   | .0652     | 0.581                             | -0.173                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.150                       | -0.188   | .0549     | 0.292                             | -0.263                      | 0.150                       | -0.158   | .0421     | 0.267                             | -0.220                      | 0.150                       | -0.114   | .0493     | 0.431                             | -0.159                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.300                       | -0.242   | .0543     | 0.224                             | -0.297                      | 0.300                       | -0.175   | .0345     | 0.197                             | -0.214                      | 0.300                       | -0.125   | .0453     | 0.363                             | -0.153                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.450                       | -0.261   | .0512     | 0.196                             | -0.276                      | 0.450                       | -0.210   | .0369     | 0.176                             | -0.221                      | 0.450                       | -0.144   | .0552     | 0.382                             | -0.152                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.600                       | -0.302   | .0665     | 0.220                             | -0.268                      | 0.600                       | -0.238   | .0501     | 0.210                             | -0.211                      | 0.600                       | -0.150   | .0580     | 0.387                             | -0.132                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.750                       | -0.355   | .1193     | 0.336                             | -0.254                      | 0.750                       | -0.220   | .0360     | 0.163                             | -0.157                      | 0.750                       | -0.246   | .1590     | 0.646                             | -0.176                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       |       |          |           |                                   |                             |       |          |           |                                   |                             |
| M = 0.698 $\alpha =$        |          |           |                                   |                             | M = 1.302 $\alpha = 00.10$  |          |           |                                   |                             | M = 2.231 $\alpha = 00.40$  |          |           |                                   |                             |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.011                       | -0.019   | .0113     | 0.595                             | -0.029                      | 0.011                       | -0.036   | -.0049    | -0.138                            | -0.054                      | 0.011                       | -0.067   | .0567     | 0.842                             | -0.103                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.150                       | -0.108   | .0331     | 0.306                             | -0.151                      | 0.150                       | -0.059   | -.0046    | -0.078                            | -0.082                      | 0.150                       | -0.068   | .0308     | 0.455                             | -0.094                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.300                       | -0.157   | .0392     | 0.250                             | -0.192                      | 0.300                       | -0.094   | .0083     | 0.088                             | -0.115                      | 0.300                       | -0.078   | .0242     | 0.311                             | -0.095                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.450                       | -0.157   | .0272     | 0.174                             | -0.165                      | 0.450                       | -0.141   | .0340     | 0.242                             | -0.148                      | 0.450                       | -0.098   | .0396     | 0.405                             | -0.103                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.600                       | -0.188   | .0438     | 0.233                             | -0.166                      | 0.600                       | -0.154   | .0405     | 0.263                             | -0.136                      | 0.600                       | -0.113   | .0500     | 0.444                             | -0.099                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.750                       | -0.235   | .0817     | 0.348                             | -0.168                      | 0.750                       | -0.285   | .1634     | 0.574                             | -0.203                      | 0.750                       | -0.142   | .0791     | 0.557                             | -0.101                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       |       |          |           |                                   |                             |       |          |           |                                   |                             |
| M = 0.697 $\alpha = 03.91$  |          |           |                                   |                             | M = 1.302 $\alpha = 04.01$  |          |           |                                   |                             | M = 2.231 $\alpha = 04.26$  |          |           |                                   |                             |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.011                       | -0.033   | .0116     | 0.348                             | -0.051                      | 0.011                       | -0.033   | -.0268    | -0.804                            | -0.051                      | 0.011                       | -0.138   | .0083     | 0.060                             | -0.212                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.150                       | -0.061   | .0161     | 0.265                             | -0.084                      | 0.150                       | -0.057   | -.0047    | -0.082                            | -0.080                      | 0.150                       | -0.109   | .0287     | 0.356                             | -0.152                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.300                       | -0.080   | .0185     | 0.232                             | -0.097                      | 0.300                       | -0.064   | .0179     | 0.281                             | -0.078                      | 0.300                       | -0.055   | .0241     | 0.437                             | -0.067                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.450                       | -0.087   | .0183     | 0.210                             | -0.092                      | 0.450                       | -0.050   | .0096     | 0.190                             | -0.053                      | 0.450                       | 0.021    | -.0396    | 1.879                             | 0.022                       |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.600                       | -0.101   | .0241     | 0.238                             | -0.089                      | 0.600                       | -0.079   | .0286     | 0.363                             | -0.069                      | 0.600                       | -0.056   | .0262     | 0.467                             | -0.049                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.750                       | -0.126   | .0502     | 0.400                             | -0.089                      | 0.750                       | -0.096   | .0426     | 0.443                             | -0.068                      | 0.750                       | -0.155   | .1227     | 0.790                             | -0.111                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       |       |          |           |                                   |                             |       |          |           |                                   |                             |
| M = 0.699 $\alpha = 07.96$  |          |           |                                   |                             | M = 1.301 $\alpha = 08.06$  |          |           |                                   |                             | M = 2.243 $\alpha = 08.31$  |          |           |                                   |                             |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.011                       | -0.631   | .1538     | 0.244                             | -0.974                      | 0.011                       | -0.173   | -.0085    | -0.049                            | -0.267                      | 0.011                       | -0.093   | .0326     | 0.351                             | -0.143                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.150                       | -0.496   | .1389     | 0.280                             | -0.694                      | 0.150                       | -0.377   | .1102     | 0.293                             | -0.526                      | 0.150                       | -0.130   | .0535     | 0.413                             | -0.181                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.300                       | -0.314   | .0904     | 0.288                             | -0.385                      | 0.300                       | -0.351   | .1148     | 0.327                             | -0.430                      | 0.300                       | -0.103   | .0426     | 0.412                             | -0.126                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.450                       | -0.094   | .0085     | 0.090                             | -0.099                      | 0.450                       | -0.072   | -.0087    | -0.122                            | -0.075                      | 0.450                       | -0.008   | -.0032    | -0.401                            | -0.008                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.600                       | -0.014   | -.0044    | -0.317                            | -0.012                      | 0.600                       | -0.027   | -.0025    | -0.093                            | -0.024                      | 0.600                       | -0.014   | .0113     | 0.803                             | -0.012                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.750                       | -0.061   | .0457     | 0.755                             | -0.043                      | 0.750                       | -0.091   | .0655     | 0.723                             | -0.064                      | 0.750                       | -0.098   | .0920     | 0.942                             | -0.069                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       |       |          |           |                                   |                             |       |          |           |                                   |                             |
| M = 0.699 $\alpha = 11.96$  |          |           |                                   |                             | M = 1.300 $\alpha = 12.06$  |          |           |                                   |                             | M = 2.235 $\alpha = 12.36$  |          |           |                                   |                             |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.011                       | -0.755   | .1978     | 0.262                             | -1.165                      | 0.011                       | -0.294   | .2243     | 0.764                             | -0.453                      | 0.011                       | -0.180   | .0691     | 0.384                             | -0.277                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.150                       | -0.771   | .2343     | 0.304                             | -1.078                      | 0.150                       | -0.374   | .1599     | 0.428                             | -0.522                      | 0.150                       | -0.114   | .0471     | 0.413                             | -0.159                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.300                       | -0.641   | .2059     | 0.321                             | -0.786                      | 0.300                       | -0.357   | .0982     | 0.275                             | -0.438                      | 0.300                       | -0.072   | .0313     | 0.437                             | -0.088                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.450                       | -0.359   | .1072     | 0.299                             | -0.379                      | 0.450                       | -0.234   | .0448     | 0.192                             | -0.247                      | 0.450                       | -0.060   | .0239     | 0.402                             | -0.062                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.600                       | -0.104   | .0229     | 0.221                             | -0.092                      | 0.600                       | -0.005   | -.0559    | 0.000                             | -0.004                      | 0.600                       | -0.016   | .0049     | 0.309                             | -0.014                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.750                       | -0.028   | .0117     | 0.414                             | -0.020                      | 0.750                       | -0.139   | .0951     | 0.687                             | -0.099                      | 0.750                       | -0.185   | .1803     | 0.976                             | -0.132                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       |       |          |           |                                   |                             |       |          |           |                                   |                             |
| M = 0.698 $\alpha = 16.02$  |          |           |                                   |                             | M = 1.299 $\alpha = 16.07$  |          |           |                                   |                             | M = 2.235 $\alpha = 16.42$  |          |           |                                   |                             |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.011                       | -1.061   | .3722     | 0.351                             | -1.638                      | 0.011                       | -0.226   | -.0703    | -0.312                            | -0.348                      | 0.011                       | -0.140   | .0934     | 0.667                             | -0.216                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.150                       | -0.902   | .3153     | 0.350                             | -1.261                      | 0.150                       | -0.465   | .2120     | 0.456                             | -0.651                      | 0.150                       | -0.063   | .0386     | 0.613                             | -0.088                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.300                       | -0.709   | .2384     | 0.336                             | -0.870                      | 0.300                       | -0.467   | .2552     | 0.547                             | -0.572                      | 0.300                       | -0.019   | .0098     | 0.525                             | -0.023                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.450                       | -0.497   | .1454     | 0.293                             | -0.524                      | 0.450                       | -0.200   | .0268     | 0.134                             | -0.211                      | 0.450                       | -0.015   | .0125     | 0.840                             | -0.015                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.600                       | -0.388   | .1329     | 0.342                             | -0.344                      | 0.600                       | -0.205   | .0686     | 0.334                             | -0.181                      | 0.600                       | -0.012   | .0142     | 1.162                             | -0.010                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 0.750                       | -0.135   | .0437     | 0.323                             | -0.096                      | 0.750                       | 0.052    | .1239     | 2.304                             | -0.036                      | 0.750                       | -0.229   | .2155     | 0.941                             | -0.163                      |       |          |           |                                   |                             |       |          |           |                                   |                             |
| 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       | 1.000                       | 0.000    | .0000     | 0.000                             | 0.000                       |       |          |           |                                   |                             |       |          |           |                                   |                             |



TABLE XIV.- TOTAL COEFFICIENTS FOR THE BODY

| M                     | $\alpha$ | $C_N$  | $C_m$   | $C_Y$  | $C_n$  | M                                         | $\alpha$ | $C_N$  | $C_m$   | $C_Y$  | $C_n$  | M                                          | $\alpha$ | $C_N$  | $C_m$   | $C_Y$  | $C_n$  | M                    | $\alpha$ | $C_N$  | $C_m$   | $C_Y$  | $C_n$  |
|-----------------------|----------|--------|---------|--------|--------|-------------------------------------------|----------|--------|---------|--------|--------|--------------------------------------------|----------|--------|---------|--------|--------|----------------------|----------|--------|---------|--------|--------|
| BVW $\beta=0.0^\circ$ |          |        |         |        |        | BVWC $\delta=0.5^\circ$ $\beta=0.0^\circ$ |          |        |         |        |        | BVWC $\delta=10.2^\circ$ $\beta=0.0^\circ$ |          |        |         |        |        | BW $\beta=0.0^\circ$ |          |        |         |        |        |
| 0.701                 | -04.28   | -0.041 | -0.0047 | 0.002  | 0.000  | 0.700                                     | -04.28   | -0.040 | -0.0077 | 0.002  | 0.001  | 0.697                                      | -04.42   | -0.042 | -0.0031 | 0.002  | 0.000  | 0.698                | -04.42   | -0.039 | -0.0044 | 0.002  | 0.001  |
| 0.698                 | -00.20   | 0.003  | -0.0001 | -0.000 | 0.000  | 0.698                                     | -00.15   | 0.002  | -0.0003 | -0.001 | -0.000 | 0.696                                      | -00.06   | -0.001 | 0.0032  | 0.001  | 0.000  | 0.700                | -00.06   | 0.005  | 0.0009  | -0.000 | -0.000 |
| 0.697                 | 03.78    | 0.046  | 0.0046  | -0.002 | -0.000 | 0.696                                     | 03.68    | 0.039  | 0.0074  | -0.003 | -0.001 | 0.701                                      | 03.68    | 0.030  | 0.0097  | 0.000  | -0.000 | 0.699                | 03.83    | 0.045  | 0.0055  | -0.002 | -0.001 |
| 0.701                 | 07.66    | 0.093  | 0.0095  | -0.004 | -0.001 | 0.695                                     | 07.85    | 0.093  | 0.0162  | -0.006 | -0.002 | 0.699                                      | 07.71    | 0.086  | 0.0236  | -0.006 | -0.003 | 0.700                | 07.76    | 0.093  | 0.0106  | -0.003 | -0.001 |
| 0.697                 | 11.79    | 0.135  | 0.0175  | -0.006 | -0.002 | 0.700                                     | 11.79    | 0.149  | 0.0291  | -0.007 | -0.002 | 0.700                                      | 11.74    | 0.150  | 0.0346  | -0.007 | -0.003 | 0.696                | 11.79    | 0.148  | 0.0150  | -0.006 | -0.002 |
| 0.701                 | 15.76    | 0.192  | 0.0184  | -0.010 | -0.002 | 0.702                                     | 15.91    | 0.200  | 0.0459  | -0.010 | -0.003 | 0.699                                      | 15.76    | 0.213  | 0.0491  | -0.010 | -0.004 | 0.699                | 15.67    | 0.210  | 0.0191  | -0.006 | -0.001 |
| 0.904                 | 03.78    | 0.050  | 0.0018  | -0.001 | -0.000 | 0.905                                     | 03.73    | 0.047  | 0.0051  | -0.002 | -0.001 | 0.903                                      | 03.78    | 0.033  | 0.0064  | 0.001  | -0.000 | 0.903                | 03.78    | 0.050  | 0.0028  | -0.001 | -0.001 |
| 0.951                 | 03.87    | 0.053  | -0.0008 | -0.001 | -0.000 | 0.955                                     | 03.78    | 0.049  | 0.0027  | -0.002 | -0.001 | 0.951                                      | 03.82    | 0.041  | 0.0063  | 0.002  | 0.000  | 0.957                | 03.88    | 0.052  | 0.0011  | -0.001 | -0.001 |
| 1.011                 | 03.98    | 0.056  | -0.0037 | -0.002 | -0.000 | 1.005                                     | 03.88    | 0.052  | -0.0015 | -0.002 | -0.000 | 1.004                                      | 03.93    | 0.041  | 0.0033  | 0.001  | 0.000  | 1.008                | -00.05   | 0.007  | -0.0012 | 0.000  | -0.000 |
| 1.049                 | 03.98    | 0.055  | -0.0049 | -0.001 | 0.000  | 1.044                                     | 03.88    | 0.051  | -0.0015 | -0.001 | -0.000 | 1.050                                      | 03.93    | 0.038  | 0.0044  | 0.000  | 0.000  | 1.002                | 03.88    | 0.053  | -0.0022 | -0.001 | -0.000 |
| 1.103                 | 03.98    | 0.054  | -0.0051 | -0.000 | 0.000  | 1.102                                     | 03.93    | 0.048  | -0.0016 | -0.000 | 0.000  | 1.099                                      | 03.93    | 0.034  | 0.0039  | 0.002  | 0.000  | 1.062                | 03.93    | 0.051  | -0.0026 | -0.001 | -0.000 |
| 1.302                 | -04.18   | -0.040 | 0.0029  | 0.003  | 0.000  | 1.298                                     | -04.13   | -0.037 | -0.0014 | 0.002  | 0.000  | 1.300                                      | -04.08   | -0.041 | 0.0056  | 0.000  | 0.001  | 1.109                | 03.93    | 0.051  | -0.0037 | -0.001 | -0.000 |
| 1.302                 | -00.15   | 0.001  | 0.0002  | 0.002  | 0.001  | 1.299                                     | -00.20   | 0.001  | -0.0000 | 0.002  | 0.000  | 1.303                                      | -00.10   | -0.004 | 0.0048  | 0.003  | 0.001  | 1.299                | -04.18   | -0.038 | 0.0014  | 0.002  | -0.000 |
| 1.303                 | 03.88    | 0.043  | -0.0025 | 0.000  | 0.000  | 1.301                                     | 03.69    | 0.039  | 0.0016  | 0.001  | 0.000  | 1.304                                      | 03.78    | 0.028  | 0.0065  | 0.002  | 0.000  | 1.304                | -00.10   | 0.002  | -0.0005 | 0.001  | 0.000  |
| 1.302                 | 07.91    | 0.090  | -0.0056 | -0.002 | 0.000  | 1.299                                     | 07.76    | 0.088  | 0.0040  | -0.000 | 0.000  | 1.303                                      | 07.81    | 0.084  | 0.0119  | 0.000  | 0.000  | 1.303                | 03.83    | 0.042  | -0.0021 | -0.001 | 0.000  |
| 1.302                 | 11.89    | 0.137  | -0.0080 | -0.002 | -0.000 | 1.296                                     | 11.79    | 0.139  | 0.0093  | -0.001 | 0.000  | 1.300                                      | 11.89    | 0.140  | 0.0139  | -0.003 | -0.001 | 1.301                | 07.81    | 0.088  | -0.0054 | -0.002 | -0.000 |
| 1.302                 | 15.87    | 0.186  | -0.0067 | -0.006 | -0.000 | 1.299                                     | 15.82    | 0.194  | 0.0146  | -0.003 | 0.001  | 1.299                                      | 15.72    | 0.195  | 0.0176  | -0.006 | -0.001 | 1.301                | 11.84    | 0.140  | -0.0101 | -0.003 | -0.000 |
| 1.499                 | 03.83    | 0.039  | -0.0025 | 0.000  | 0.000  | 1.498                                     | 03.68    | 0.035  | 0.0014  | -0.000 | -0.000 | 1.503                                      | 03.78    | 0.026  | 0.0069  | 0.002  | 0.000  | 1.300                | 15.87    | 0.195  | -0.0119 | -0.010 | -0.003 |
| 1.703                 | 03.78    | 0.036  | -0.0013 | -0.000 | 0.000  | 1.698                                     | 03.83    | 0.035  | 0.0019  | -0.000 | -0.000 | 1.703                                      | 03.73    | 0.025  | 0.0079  | 0.001  | 0.000  | 1.500                | 03.78    | 0.038  | -0.0028 | -0.001 | -0.001 |
| 1.908                 | 03.93    | 0.033  | -0.0008 | -0.000 | 0.000  | 1.893                                     | 04.03    | 0.034  | 0.0035  | -0.000 | -0.000 | 1.909                                      | 03.93    | 0.025  | 0.0085  | 0.000  | 0.000  | 1.703                | 03.73    | 0.034  | -0.0018 | -0.002 | -0.000 |
| 2.230                 | -03.73   | -0.018 | -0.0010 | 0.000  | -0.000 | 2.234                                     | -03.83   | -0.021 | -0.0045 | 0.000  | -0.000 | 2.235                                      | -03.73   | -0.020 | 0.0024  | 0.000  | -0.000 | 1.906                | 03.93    | 0.032  | -0.0012 | -0.002 | -0.000 |
| 2.237                 | 00.20    | 0.005  | -0.0005 | -0.001 | -0.000 | 2.233                                     | 00.15    | 0.005  | -0.0004 | -0.001 | -0.000 | 2.230                                      | 00.20    | 0.001  | 0.0050  | -0.001 | -0.000 | 2.229                | -03.88   | -0.021 | -0.0009 | 0.001  | -0.000 |
| 2.235                 | 04.18    | 0.031  | -0.0005 | -0.002 | -0.000 | 2.231                                     | 04.18    | 0.031  | 0.0032  | -0.002 | -0.001 | 2.231                                      | 04.18    | 0.027  | 0.0087  | -0.002 | -0.000 | 2.226                | 00.25    | 0.005  | -0.0006 | -0.000 | -0.000 |
| 2.234                 | 08.21    | 0.062  | 0.0003  | -0.003 | -0.000 | 2.234                                     | 08.16    | 0.064  | 0.0072  | -0.002 | -0.000 | 2.236                                      | 08.26    | 0.061  | 0.0112  | -0.002 | -0.000 | 2.229                | 04.13    | 0.032  | -0.0008 | -0.002 | 0.000  |
| 2.233                 | 12.19    | 0.095  | 0.0026  | -0.004 | -0.000 | 2.231                                     | 12.24    | 0.099  | 0.0127  | -0.003 | -0.000 | 2.232                                      | 12.24    | 0.095  | 0.0134  | -0.003 | -0.000 | 2.234                | 08.26    | 0.061  | 0.0002  | -0.004 | -0.000 |
| 2.227                 | 16.22    | 0.140  | 0.0072  | -0.005 | -0.000 | 2.224                                     | 16.22    | 0.140  | 0.0189  | -0.004 | -0.001 | 2.232                                      | 16.26    | 0.134  | 0.0195  | -0.005 | -0.000 | 2.232                | 12.24    | 0.094  | 0.0022  | -0.004 | -0.000 |
|                       |          |        |         |        |        |                                           |          |        |         |        |        |                                            |          |        |         |        |        | 2.232                | 16.22    | 0.141  | 0.0076  | -0.005 | -0.000 |
| BVW $\beta=5.3^\circ$ |          |        |         |        |        | BVWC $\delta=0.5^\circ$ $\beta=5.3^\circ$ |          |        |         |        |        | BVWC $\delta=10.7^\circ$ $\beta=5.3^\circ$ |          |        |         |        |        |                      |          |        |         |        |        |
| 0.700                 | -04.15   | -0.042 | -0.0058 | -0.003 | -0.007 | 0.699                                     | -04.10   | -0.041 | -0.0098 | 0.002  | -0.006 | 0.700                                      | -04.00   | -0.042 | -0.0046 | -0.003 | -0.007 |                      |          |        |         |        |        |
| 0.700                 | -00.05   | 0.002  | -0.0007 | -0.004 | -0.007 | 0.700                                     | -00.05   | -0.000 | -0.0022 | -0.003 | -0.007 | 0.698                                      | -00.00   | -0.004 | 0.0032  | -0.006 | -0.007 |                      |          |        |         |        |        |
| 0.698                 | 03.91    | 0.044  | 0.0036  | -0.007 | -0.007 | 0.699                                     | 03.96    | 0.039  | 0.0069  | -0.007 | -0.007 | 0.697                                      | 03.91    | 0.030  | 0.0091  | -0.007 | -0.007 |                      |          |        |         |        |        |
| 0.700                 | 07.96    | 0.091  | 0.0093  | -0.013 | -0.006 | 0.700                                     | 07.96    | 0.089  | 0.0147  | -0.008 | -0.009 | 0.699                                      | 07.96    | 0.079  | 0.0268  | -0.003 | -0.004 |                      |          |        |         |        |        |
| 0.697                 | 11.96    | 0.143  | 0.0163  | -0.014 | -0.008 | 0.698                                     | 12.01    | 0.141  | 0.0285  | -0.009 | -0.008 | 0.699                                      | 11.96    | 0.145  | 0.0353  | -0.001 | -0.004 |                      |          |        |         |        |        |
| 0.699                 | 15.87    | 0.197  | 0.0235  | -0.018 | -0.009 | 0.700                                     | 15.87    | 0.205  | 0.0419  | -0.008 | -0.008 | 0.698                                      | 16.02    | 0.217  | 0.0485  | 0.009  | -0.004 |                      |          |        |         |        |        |
| 1.302                 | -03.90   | -0.041 | 0.0029  | -0.002 | -0.008 | 1.304                                     | -03.90   | -0.037 | -0.0018 | -0.000 | -0.009 | 1.300                                      | -03.81   | -0.041 | 0.0055  | -0.004 | -0.010 |                      |          |        |         |        |        |
| 1.304                 | -00.05   | -0.000 | -0.0007 | -0.002 | -0.008 | 1.301                                     | 00.15    | 0.001  | -0.0004 | -0.002 | -0.008 | 1.302                                      | 00.10    | -0.005 | 0.0067  | -0.006 | -0.009 |                      |          |        |         |        |        |
| 1.303                 | 04.11    | 0.042  | -0.0028 | -0.007 | -0.007 | 1.301                                     | 04.11    | 0.039  | 0.0031  | -0.007 | -0.007 | 1.302                                      | 04.01    | 0.030  | 0.0078  | -0.004 | -0.008 |                      |          |        |         |        |        |
| 1.302                 | 08.11    | 0.088  | -0.0045 | -0.013 | -0.007 | 1.304                                     | 08.01    | 0.086  | 0.0055  | -0.005 | -0.008 | 1.301                                      | 08.06    | -0.085 | -0.0119 | -0.001 | -0.010 |                      |          |        |         |        |        |
| 1.302                 | 12.21    | 0.139  | -0.0053 | -0.016 | -0.008 | 1.302                                     | 12.16    | 0.140  | 0.0118  | -0.009 | -0.007 | 1.300                                      | 12.06    | 0.145  | 0.0164  | -0.013 | -0.007 |                      |          |        |         |        |        |
| 1.300                 | 16.07    | 0.191  | -0.0075 | -0.022 | -0.011 | 1.302                                     | 16.12    | 0.194  | 0.0161  | -0.011 | -0.007 | 1.299                                      | 16.07    | 0.198  | 0.0182  | -0.018 | -0.006 |                      |          |        |         |        |        |
| 2.228                 | -03.75   | -0.020 | -0.0024 | -0.007 | -0.007 | 2.229                                     | -03.65   | -0.022 | -0.0040 | -0.006 | -0.006 | 2.227                                      | -03.56   | -0.021 | 0.0014  | -0.010 | -0.007 |                      |          |        |         |        |        |
| 2.232                 | 00.30    | 0.002  | -0.0003 | -0.009 | -0.006 | 2.233                                     | 00.35    | 0.002  | 0.0009  | -0.008 | -0.006 | 2.231                                      | 00.40    | 0.002  | 0.0065  | -0.009 | -0.007 |                      |          |        |         |        |        |
| 2.232                 | 04.36    | 0.029  | 0.0009  | -0.012 | -0.006 | 2.232                                     | 04.31    | 0.030  | 0.0057  | -0.011 | -0.006 | 2.231                                      | 04.26    | 0.027  | 0.0107  | -0.010 | -0.006 |                      |          |        |         |        |        |
| 2.229                 | 08.31    | 0.057  | 0.0023  | -0.016 | -0.005 | 2.236                                     | 08.36    | 0.062  | 0.0104  | -0.015 | -0.005 | 2.243                                      | 08.31    | 0.058  | 0.0136  | -0.015 | -0.007 |                      |          |        |         |        |        |
| 2.232                 | 12.41    | 0.091  | 0.0062  | -0.023 | -0.006 | 2.228                                     | 12.41    | 0.097  | 0.0155  | -0.020 | -0.005 | 2.235                                      | 12.36    | 0.092  | 0.0183  | -0.019 | -0.005 |                      |          |        |         |        |        |
| 2.232                 | 16.32    | 0.134  | 0.0124  | -0.032 | -0.006 | 2.232                                     | 16.42    | 0.138  | 0.0217  | -0.024 | -0.005 | 2.235                                      | 16.42    | 0.128  | 0.0230  | -0.024 | -0.002 |                      |          |        |         |        |        |



TABLE XV.- TOTAL COEFFICIENTS FOR THE WING

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| M                     | $\alpha$ | $C_N$  | $C_m$   | $C_b$   | M                                          | $\alpha$ | $C_N$  | $C_m$   | $C_b$   | M                                          | $\alpha$ | $C_N$  | $C_m$   | $C_b$   | M                    | $\alpha$ | $C_N$  | $C_m$   | $C_b$   |
|-----------------------|----------|--------|---------|---------|--------------------------------------------|----------|--------|---------|---------|--------------------------------------------|----------|--------|---------|---------|----------------------|----------|--------|---------|---------|
| BVW $\beta=0.0^\circ$ |          |        |         |         | BVWC $\delta=-0.5^\circ$ $\beta=0.0^\circ$ |          |        |         |         | BVWC $\delta=10.2^\circ$ $\beta=0.0^\circ$ |          |        |         |         | BW $\beta=0.0^\circ$ |          |        |         |         |
| 0.701                 | -04.28   | -0.155 | 0.0443  | 0.0793  | 0.700                                      | -04.28   | -0.147 | 0.0469  | 0.0774  | 0.697                                      | -04.42   | -0.167 | 0.0455  | 0.0849  | 0.698                | -04.42   | -0.159 | 0.0474  | 0.0822  |
| 0.698                 | -00.26   | 0.006  | -0.023  | -0.098  | 0.698                                      | -00.15   | 0.003  | -0.012  | -0.0010 | 0.696                                      | -00.06   | -0.009 | -0.007  | -0.011  | 0.700                | -00.06   | 0.015  | -0.0039 | -0.0077 |
| 0.697                 | 03.78    | 0.167  | -0.0481 | -0.0845 | 0.696                                      | 03.68    | 0.150  | -0.0475 | -0.0782 | 0.701                                      | 03.68    | 0.131  | -0.0538 | -0.0731 | 0.699                | 03.83    | 0.174  | -0.0508 | -0.0904 |
| 0.701                 | 07.66    | 0.341  | -0.0913 | -0.1682 | 0.695                                      | 07.85    | 0.312  | -0.0933 | -0.1598 | 0.699                                      | 07.71    | 0.291  | -0.0948 | -0.1501 | 0.700                | 07.76    | 0.350  | -0.0939 | -0.1739 |
| 0.697                 | 11.79    | 0.430  | -0.0956 | -0.1969 | 0.700                                      | 11.79    | 0.457  | -0.1256 | -0.2264 | 0.700                                      | 11.74    | 0.428  | -0.1287 | -0.2161 | 0.696                | 11.79    | 0.538  | -0.1430 | -0.2576 |
| 0.701                 | 15.76    | 0.566  | -0.1325 | -0.2477 | 0.702                                      | 15.91    | 0.507  | -0.1175 | -0.2300 | 0.699                                      | 15.76    | 0.566  | -0.1613 | -0.2709 | 0.699                | 15.67    | 0.720  | -0.1930 | -0.3324 |
| 0.904                 | 03.78    | 0.189  | -0.0604 | -0.0967 | 0.905                                      | 03.73    | 0.168  | -0.0584 | -0.0885 | 0.903                                      | 03.78    | 0.150  | -0.0676 | -0.0851 | 0.903                | 03.78    | 0.200  | -0.0647 | -0.1051 |
| 0.951                 | 03.87    | 0.215  | -0.0804 | -0.1101 | 0.955                                      | 03.78    | 0.193  | -0.0769 | -0.1011 | 0.951                                      | 03.82    | 0.177  | -0.0883 | -0.0991 | 0.957                | 03.88    | 0.225  | -0.0845 | -0.1174 |
| 1.011                 | 03.98    | 0.200  | -0.0733 | -0.1025 | 1.005                                      | 03.88    | 0.179  | -0.0710 | -0.0939 | 1.004                                      | 03.93    | 0.164  | -0.0807 | -0.0913 | 1.008                | 00.05    | 0.023  | -0.0088 | -0.1114 |
| 1.049                 | 03.98    | 0.191  | -0.0704 | -0.0978 | 1.044                                      | 03.88    | 0.169  | -0.0661 | -0.0884 | 1.050                                      | 03.93    | 0.144  | -0.0708 | -0.0808 | 1.002                | 03.88    | 0.205  | -0.0764 | -0.1069 |
| 1.103                 | 03.98    | 0.187  | -0.0677 | -0.0954 | 1.102                                      | 03.93    | 0.161  | -0.0605 | -0.0849 | 1.099                                      | 03.93    | 0.135  | -0.0653 | -0.0763 | 1.062                | 03.93    | 0.190  | -0.0691 | -0.0994 |
| 1.302                 | -04.18   | -0.153 | 0.0565  | 0.0784  | 1.298                                      | -04.13   | -0.133 | 0.0537  | 0.0699  | 1.300                                      | -04.08   | -0.162 | 0.0571  | 0.0824  | 1.109                | 03.93    | 0.192  | -0.0707 | -0.0998 |
| 1.302                 | -00.15   | -0.004 | 0.0034  | 0.0026  | 1.299                                      | -00.20   | -0.005 | 0.0039  | 0.0032  | 1.303                                      | -00.10   | -0.026 | 0.0024  | 0.0100  | 1.299                | -04.18   | -0.147 | 0.0530  | 0.0758  |
| 1.303                 | 03.88    | 0.149  | -0.0519 | -0.0760 | 1.301                                      | 03.69    | 0.124  | -0.0467 | -0.0648 | 1.304                                      | 03.78    | 0.103  | -0.0516 | -0.0588 | 1.304                | -00.10   | 0.003  | -0.0004 | -0.0016 |
| 1.302                 | 07.91    | 0.307  | -0.1078 | -0.1535 | 1.299                                      | 07.76    | 0.272  | -0.1038 | -0.1391 | 1.303                                      | 07.81    | 0.251  | -0.1028 | -0.1310 | 1.303                | 03.83    | 0.154  | -0.0551 | -0.0794 |
| 1.302                 | 11.89    | 0.455  | -0.1604 | -0.2221 | 1.296                                      | 11.79    | 0.403  | -0.1504 | -0.2011 | 1.300                                      | 11.89    | 0.388  | -0.1507 | -0.1958 | 1.301                | 07.81    | 0.310  | -0.1097 | -0.1546 |
| 1.302                 | 15.87    | 0.577  | -0.2023 | -0.2685 | 1.299                                      | 15.82    | 0.521  | -0.1859 | -0.2474 | 1.299                                      | 15.72    | 0.487  | -0.1767 | -0.2346 | 1.301                | 11.84    | 0.452  | -0.1603 | -0.2191 |
| 1.499                 | 03.83    | 0.127  | -0.0435 | -0.0639 | 1.498                                      | 03.68    | 0.112  | -0.0421 | -0.0581 | 1.503                                      | 03.78    | 0.093  | -0.0452 | -0.0529 | 1.300                | 15.87    | 0.591  | -0.2107 | -0.2781 |
| 1.703                 | 03.78    | 0.120  | -0.0409 | -0.0602 | 1.698                                      | 03.83    | 0.108  | -0.0406 | -0.0561 | 1.703                                      | 03.73    | 0.089  | -0.0416 | -0.0496 | 1.500                | 03.78    | 0.130  | -0.0452 | -0.0660 |
| 1.908                 | 03.93    | 0.107  | -0.0350 | -0.0526 | 1.893                                      | 04.03    | 0.103  | -0.0366 | -0.0524 | 1.909                                      | 03.93    | 0.083  | -0.0364 | -0.0454 | 1.703                | 03.73    | 0.117  | -0.0406 | -0.0592 |
| 2.230                 | -03.73   | -0.059 | 0.0207  | 0.0290  | 2.234                                      | -03.83   | -0.064 | 0.0244  | 0.0324  | 2.235                                      | -03.73   | -0.069 | 0.0231  | 0.0332  | 1.906                | 03.93    | 0.108  | -0.0360 | -0.0537 |
| 2.237                 | 00.20    | 0.011  | -0.0030 | -0.0053 | 2.233                                      | 00.15    | 0.010  | -0.0030 | -0.0051 | 2.230                                      | 00.20    | -0.002 | -0.0030 | -0.0015 | 2.229                | -03.88   | -0.069 | 0.0242  | 0.0342  |
| 2.235                 | 04.18    | 0.091  | -0.0305 | -0.0442 | 2.231                                      | 04.18    | 0.088  | -0.0308 | -0.0437 | 2.231                                      | 04.18    | 0.074  | -0.0312 | -0.0394 | 2.226                | 00.25    | 0.014  | -0.0044 | -0.0069 |
| 2.234                 | 08.21    | 0.174  | -0.0599 | -0.0825 | 2.234                                      | 08.16    | 0.165  | -0.0582 | -0.0800 | 2.236                                      | 08.26    | 0.150  | -0.0550 | -0.0737 | 2.229                | 04.13    | 0.097  | -0.0329 | -0.0476 |
| 2.233                 | 12.19    | 0.239  | -0.0835 | -0.1118 | 2.231                                      | 12.24    | 0.231  | -0.0820 | -0.1096 | 2.232                                      | 12.24    | 0.217  | -0.0777 | -0.1035 | 2.234                | 08.26    | 0.175  | -0.0601 | -0.0833 |
| 2.227                 | 16.22    | 0.303  | -0.1075 | -0.1403 | 2.224                                      | 16.22    | 0.293  | -0.1055 | -0.1367 | 2.232                                      | 16.26    | 0.282  | -0.1024 | -0.1322 | 2.232                | 12.24    | 0.233  | -0.0820 | -0.1090 |
|                       |          |        |         |         |                                            |          |        |         |         |                                            |          |        |         |         | 2.232                | 16.22    | 0.305  | -0.1085 | -0.1407 |
| BVW $\beta=5.3^\circ$ |          |        |         |         | BVWC $\delta=0.5^\circ$ $\beta=5.3^\circ$  |          |        |         |         | BVWC $\delta=10.7^\circ$ $\beta=5.3^\circ$ |          |        |         |         |                      |          |        |         |         |
| 0.700                 | -04.15   | -0.177 | 0.0510  | 0.0946  | 0.699                                      | -04.10   | -0.174 | 0.0529  | 0.0936  | 0.700                                      | -04.00   | -0.177 | 0.0494  | 0.0932  |                      |          |        |         |         |
| 0.700                 | -00.05   | -0.001 | 0.0001  | 0.0042  | 0.700                                      | -00.05   | -0.003 | -0.0001 | 0.0047  | 0.698                                      | -00.00   | -0.007 | -0.0031 | 0.0052  |                      |          |        |         |         |
| 0.698                 | 03.91    | 0.164  | -0.0471 | -0.0800 | 0.699                                      | 03.96    | 0.160  | -0.0486 | -0.0793 | 0.697                                      | 03.91    | 0.148  | -0.0531 | -0.0771 |                      |          |        |         |         |
| 0.700                 | 07.96    | 0.359  | -0.0955 | -0.1743 | 0.700                                      | 07.96    | 0.344  | -0.0980 | -0.1702 | 0.699                                      | 07.96    | 0.332  | -0.0994 | -0.1631 |                      |          |        |         |         |
| 0.697                 | 11.96    | 0.474  | -0.1152 | -0.2153 | 0.698                                      | 12.01    | 0.435  | -0.1050 | -0.1994 | 0.699                                      | 11.96    | 0.447  | -0.1130 | -0.2085 |                      |          |        |         |         |
| 0.699                 | 15.87    | 0.603  | -0.1442 | -0.2643 | 0.700                                      | 15.87    | 0.584  | -0.1464 | -0.2591 | 0.698                                      | 16.02    | 0.596  | -0.1436 | -0.2633 |                      |          |        |         |         |
| 1.302                 | -03.90   | -0.163 | 0.0592  | 0.0855  | 1.304                                      | -03.90   | -0.157 | 0.0584  | 0.0833  | 1.300                                      | -03.81   | -0.164 | 0.0568  | 0.0853  |                      |          |        |         |         |
| 1.304                 | -00.05   | -0.011 | 0.0065  | 0.0083  | 1.301                                      | 00.15    | -0.002 | 0.0021  | 0.0035  | 1.302                                      | 00.10    | -0.018 | 0.0050  | 0.0095  |                      |          |        |         |         |
| 1.303                 | 08.11    | 0.356  | -0.0540 | -0.0778 | 1.301                                      | 04.11    | 0.168  | -0.0568 | -0.0795 | 1.302                                      | 04.01    | 0.127  | -0.0513 | -0.0682 |                      |          |        |         |         |
| 1.302                 | 08.11    | 0.326  | -0.1150 | -0.1620 | 1.304                                      | 08.01    | 0.303  | -0.1101 | -0.1527 | 1.301                                      | 08.06    | 0.301  | -0.1127 | -0.1523 |                      |          |        |         |         |
| 1.302                 | 12.21    | 0.487  | -0.1744 | -0.2352 | 1.302                                      | 12.16    | 0.465  | -0.1690 | -0.2273 | 1.300                                      | 12.06    | 0.456  | -0.1675 | -0.2241 |                      |          |        |         |         |
| 1.300                 | 16.07    | 0.595  | -0.2088 | -0.2759 | 1.302                                      | 16.12    | 0.584  | -0.2077 | -0.2732 | 1.299                                      | 16.07    | 0.577  | -0.2065 | -0.2706 |                      |          |        |         |         |
| 2.228                 | -03.75   | -0.077 | 0.0273  | 0.0378  | 2.229                                      | -03.65   | -0.076 | 0.0277  | 0.0375  | 2.227                                      | -03.56   | -0.080 | 0.0265  | 0.0385  |                      |          |        |         |         |
| 2.232                 | 00.30    | 0.002  | 0.0003  | -0.0010 | 2.233                                      | 00.35    | 0.004  | -0.0007 | 0.0016  | 2.231                                      | 00.40    | -0.001 | -0.0030 | -0.0009 |                      |          |        |         |         |
| 2.232                 | 04.36    | 0.095  | -0.0318 | -0.0458 | 2.232                                      | 04.31    | 0.094  | -0.0332 | -0.0462 | 2.231                                      | 04.26    | 0.084  | -0.0340 | -0.0430 |                      |          |        |         |         |
| 2.229                 | 08.31    | 0.176  | -0.0602 | -0.0837 | 2.236                                      | 08.36    | 0.180  | -0.0631 | -0.0864 | 2.243                                      | 08.31    | 0.169  | -0.0608 | -0.0819 |                      |          |        |         |         |
| 2.232                 | 12.41    | 0.254  | -0.0882 | -0.1190 | 2.228                                      | 12.41    | 0.258  | -0.0908 | -0.1215 | 2.235                                      | 12.36    | 0.244  | -0.0864 | -0.1155 |                      |          |        |         |         |
| 2.232                 | 16.32    | 0.323  | -0.1137 | -0.1501 | 2.232                                      | 16.42    | 0.323  | -0.1153 | -0.1507 | 2.235                                      | 16.42    | 0.317  | -0.1126 | -0.1476 |                      |          |        |         |         |



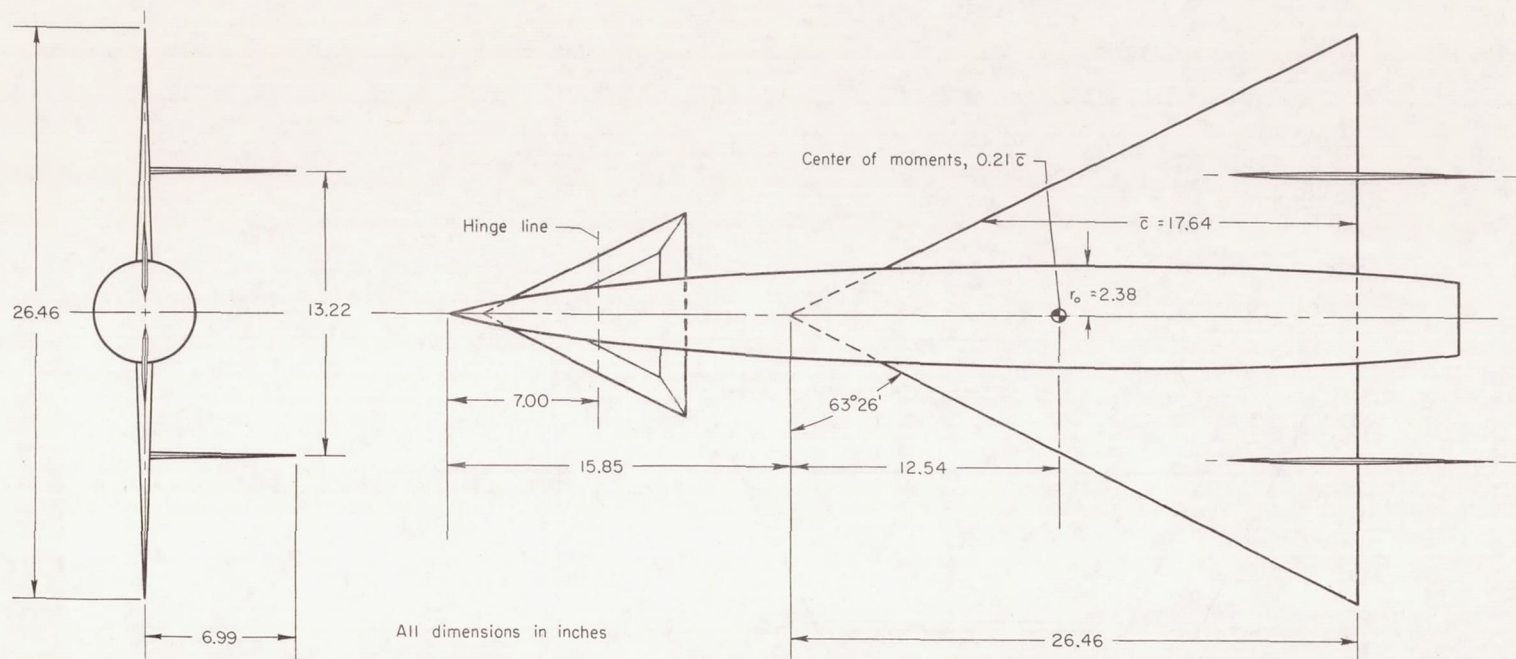
TABLE XVI.- TOTAL COEFFICIENTS FOR THE VERTICAL TAIL

| M                     | $\alpha$ | $C_Y$  | $C_n$  | $C_b$ | M                                         | $\alpha$ | $C_Y$  | $C_n$  | $C_b$ | M                                          | $\alpha$ | $C_Y$  | $C_n$  | $C_b$ |
|-----------------------|----------|--------|--------|-------|-------------------------------------------|----------|--------|--------|-------|--------------------------------------------|----------|--------|--------|-------|
| BVW $\beta=0.0^\circ$ |          |        |        |       | BVWC $\delta=0.5^\circ$ $\beta=0.0^\circ$ |          |        |        |       | BVWC $\delta=10.2^\circ$ $\beta=0.0^\circ$ |          |        |        |       |
| 0.701                 | -04.28   | -0.004 | .0017  | .0001 | 0.700                                     | -04.28   | -0.004 | .0015  | .0001 | 0.697                                      | -04.42   | -0.014 | .0070  | .0001 |
| 0.698                 | -00.20   | 0.005  | -.0021 | .0001 | 0.698                                     | -00.15   | 0.005  | -.0021 | .0001 | 0.696                                      | -00.06   | 0.005  | -.0022 | .0001 |
| 0.697                 | 03.78    | 0.011  | -.0045 | .0001 | 0.696                                     | 03.68    | 0.009  | -.0036 | .0001 | 0.701                                      | 03.68    | 0.007  | -.0031 | .0001 |
| 0.701                 | 07.66    | 0.009  | -.0040 | .0001 | 0.695                                     | 07.85    | 0.005  | -.0023 | .0001 | 0.699                                      | 07.71    | -0.009 | .0036  | .0001 |
| 0.697                 | 11.79    | -0.007 | .0036  | .0001 | 0.700                                     | 11.79    | -0.008 | .0033  | .0001 | 0.700                                      | 11.74    | -0.023 | .0097  | .0001 |
| 0.701                 | 15.76    | -0.021 | .0104  | .0001 | 0.702                                     | 15.91    | -0.029 | .0138  | .0001 | 0.699                                      | 15.76    | -0.036 | .0172  | .0001 |
| 0.904                 | 03.78    | 0.012  | -.0053 | .0001 | 0.905                                     | 03.73    | 0.010  | -.0041 | .0001 | 0.903                                      | 03.78    | 0.009  | -.0038 | .0001 |
| 0.951                 | 03.87    | 0.013  | -.0054 | .0001 | 0.955                                     | 03.78    | 0.010  | -.0042 | .0001 | 0.951                                      | 03.82    | 0.010  | -.0043 | .0001 |
| 1.011                 | 03.98    | 0.016  | -.0076 | .0001 | 1.005                                     | 03.88    | 0.012  | -.0058 | .0001 | 1.004                                      | 03.93    | 0.012  | -.0058 | .0001 |
| 1.049                 | 03.98    | 0.014  | -.0067 | .0001 | 1.044                                     | 03.88    | 0.012  | -.0060 | .0001 | 1.050                                      | 03.93    | 0.011  | -.0052 | .0001 |
| 1.103                 | 03.98    | 0.014  | -.0066 | .0001 | 1.102                                     | 03.93    | 0.013  | -.0061 | .0001 | 1.099                                      | 03.93    | 0.014  | -.0066 | .0001 |
| 1.302                 | -04.18   | -0.001 | .0003  | .0001 | 1.298                                     | -04.13   | -0.002 | .0003  | .0001 | 1.300                                      | -04.08   | -0.001 | .0001  | .0001 |
| 1.302                 | -00.15   | 0.006  | -.0031 | .0001 | 1.299                                     | -00.20   | 0.005  | -.0027 | .0001 | 1.303                                      | -00.10   | 0.004  | -.0021 | .0001 |
| 1.303                 | 03.88    | 0.009  | -.0039 | .0001 | 1.301                                     | 03.69    | 0.010  | -.0042 | .0001 | 1.304                                      | 03.78    | 0.006  | -.0027 | .0001 |
| 1.302                 | 07.91    | 0.011  | -.0046 | .0001 | 1.299                                     | 07.76    | 0.007  | -.0024 | .0001 | 1.303                                      | 07.81    | -0.002 | .0014  | .0001 |
| 1.302                 | 11.89    | 0.007  | -.0036 | .0001 | 1.296                                     | 11.79    | -0.005 | .0030  | .0001 | 1.300                                      | 11.89    | -0.008 | .0034  | .0001 |
| 1.302                 | 15.87    | -0.001 | .0021  | .0001 | 1.299                                     | 15.82    | -0.009 | .0048  | .0001 | 1.299                                      | 15.72    | -0.009 | .0055  | .0001 |
| 1.499                 | 03.83    | 0.009  | -.0040 | .0001 | 1.498                                     | 03.68    | 0.007  | -.0032 | .0001 | 1.503                                      | 03.78    | 0.005  | -.0021 | .0001 |
| 1.703                 | 03.78    | 0.007  | -.0034 | .0001 | 1.698                                     | 03.83    | 0.005  | -.0023 | .0001 | 1.703                                      | 03.73    | 0.003  | -.0016 | .0001 |
| 1.908                 | 03.93    | 0.005  | -.0025 | .0001 | 1.893                                     | 04.03    | 0.004  | -.0018 | .0001 | 1.909                                      | 03.93    | 0.003  | -.0015 | .0001 |
| 2.230                 | -03.73   | -0.000 | .0002  | .0001 | 2.234                                     | -03.83   | 0.000  | -.0001 | .0001 | 2.235                                      | -03.73   | -0.000 | .0002  | .0001 |
| 2.237                 | 00.20    | 0.003  | -.0014 | .0001 | 2.233                                     | 00.15    | 0.003  | -.0014 | .0001 | 2.230                                      | 00.20    | 0.003  | -.0013 | .0001 |
| 2.235                 | 04.18    | 0.005  | -.0022 | .0001 | 2.231                                     | 04.18    | 0.004  | -.0019 | .0001 | 2.231                                      | 04.18    | 0.003  | -.0015 | .0001 |
| 2.234                 | 08.21    | 0.006  | -.0025 | .0001 | 2.234                                     | 08.16    | 0.004  | -.0018 | .0001 | 2.236                                      | 08.26    | 0.003  | -.0013 | .0001 |
| 2.233                 | 12.19    | 0.003  | -.0014 | .0001 | 2.231                                     | 12.24    | 0.003  | -.0010 | .0001 | 2.232                                      | 12.24    | 0.002  | -.0009 | .0001 |
| 2.227                 | 16.22    | 0.002  | -.0010 | .0001 | 2.224                                     | 16.22    | 0.001  | -.0004 | .0001 | 2.232                                      | 16.26    | -0.001 | .0006  | .0001 |
| BVW $\beta=5.3^\circ$ |          |        |        |       | BVWC $\delta=0.5^\circ$ $\beta=5.3^\circ$ |          |        |        |       | BVWC $\delta=10.7^\circ$ $\beta=5.3^\circ$ |          |        |        |       |
| 0.700                 | -04.15   | -0.025 | .0105  | .0001 | 0.699                                     | -04.10   | -0.025 | .0105  | .0001 | 0.700                                      | -04.00   | -0.024 | .0100  | .0001 |
| 0.700                 | -00.05   | -0.015 | .0061  | .0001 | 0.700                                     | -00.05   | -0.015 | .0062  | .0001 | 0.698                                      | -00.00   | -0.015 | .0061  | .0001 |
| 0.698                 | 03.91    | -0.008 | .0034  | .0001 | 0.699                                     | 03.96    | -0.012 | .0046  | .0001 | 0.697                                      | 03.91    | -0.008 | .0033  | .0001 |
| 0.700                 | 07.96    | -0.010 | .0040  | .0001 | 0.700                                     | 07.96    | -0.012 | .0046  | .0001 | 0.699                                      | 07.96    | -0.026 | .0106  | .0001 |
| 0.697                 | 11.96    | -0.021 | .0088  | .0001 | 0.698                                     | 12.01    | -0.036 | .0162  | .0001 | 0.699                                      | 11.96    | -0.044 | .0199  | .0001 |
| 0.699                 | 15.87    | -0.029 | .0138  | .0001 | 0.700                                     | 15.87    | -0.052 | .0240  | .0001 | 0.698                                      | 16.02    | -0.058 | .0272  | .0001 |
| 1.302                 | -03.90   | -0.018 | .0079  | .0001 | 1.304                                     | -03.90   | -0.018 | .0070  | .0001 | 1.300                                      | -03.81   | -0.018 | .0078  | .0001 |
| 1.304                 | -00.05   | -0.014 | .0051  | .0001 | 1.301                                     | 00.15    | -0.014 | .0050  | .0001 | 1.302                                      | 00.10    | -0.013 | .0046  | .0001 |
| 1.303                 | 04.11    | -0.007 | .0026  | .0001 | 1.301                                     | 04.11    | -0.010 | .0042  | .0001 | 1.302                                      | 04.01    | -0.006 | .0025  | .0001 |
| 1.302                 | 08.11    | -0.005 | .0021  | .0001 | 1.304                                     | 08.01    | -0.011 | .0052  | .0001 | 1.301                                      | 08.06    | -0.020 | .0084  | .0001 |
| 1.302                 | 12.21    | -0.015 | .0055  | .0001 | 1.302                                     | 12.16    | -0.020 | .0100  | .0001 | 1.300                                      | 12.06    | -0.025 | .0107  | .0001 |
| 1.300                 | 16.07    | -0.026 | .0127  | .0001 | 1.302                                     | 16.12    | -0.028 | .0143  | .0001 | 1.299                                      | 16.07    | -0.026 | .0135  | .0001 |
| 2.228                 | -03.75   | -0.013 | .0058  | .0001 | 2.229                                     | -03.65   | -0.014 | .0059  | .0001 | 2.227                                      | -03.56   | -0.015 | .0061  | .0001 |
| 2.232                 | 00.30    | -0.008 | .0037  | .0001 | 2.233                                     | 00.35    | -0.006 | .0024  | .0001 | 2.231                                      | 00.40    | -0.009 | .0040  | .0001 |
| 2.232                 | 04.36    | -0.005 | .0020  | .0001 | 2.232                                     | 04.31    | -0.008 | .0030  | .0001 | 2.231                                      | 04.26    | -0.008 | .0027  | .0001 |
| 2.229                 | 08.31    | -0.003 | .0009  | .0001 | 2.236                                     | 08.36    | -0.007 | .0028  | .0001 | 2.243                                      | 08.31    | -0.008 | .0032  | .0001 |
| 2.232                 | 12.41    | -0.006 | .0011  | .0001 | 2.228                                     | 12.41    | -0.008 | .0031  | .0001 | 2.235                                      | 12.36    | -0.010 | .0038  | .0001 |
| 2.232                 | 16.32    | -0.011 | .0039  | .0001 | 2.232                                     | 16.42    | -0.006 | .0014  | .0001 | 2.235                                      | 16.42    | -0.008 | .0025  | .0001 |





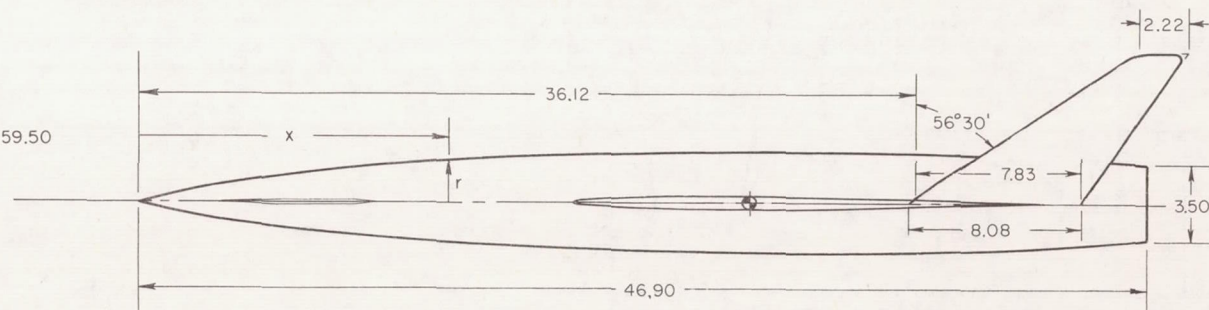




Equation of body ordinates:

$$\frac{r}{r_o} = \left[ 1 - \left( 1 - \frac{2x}{l_o} \right)^2 \right]^{\frac{3}{4}}$$

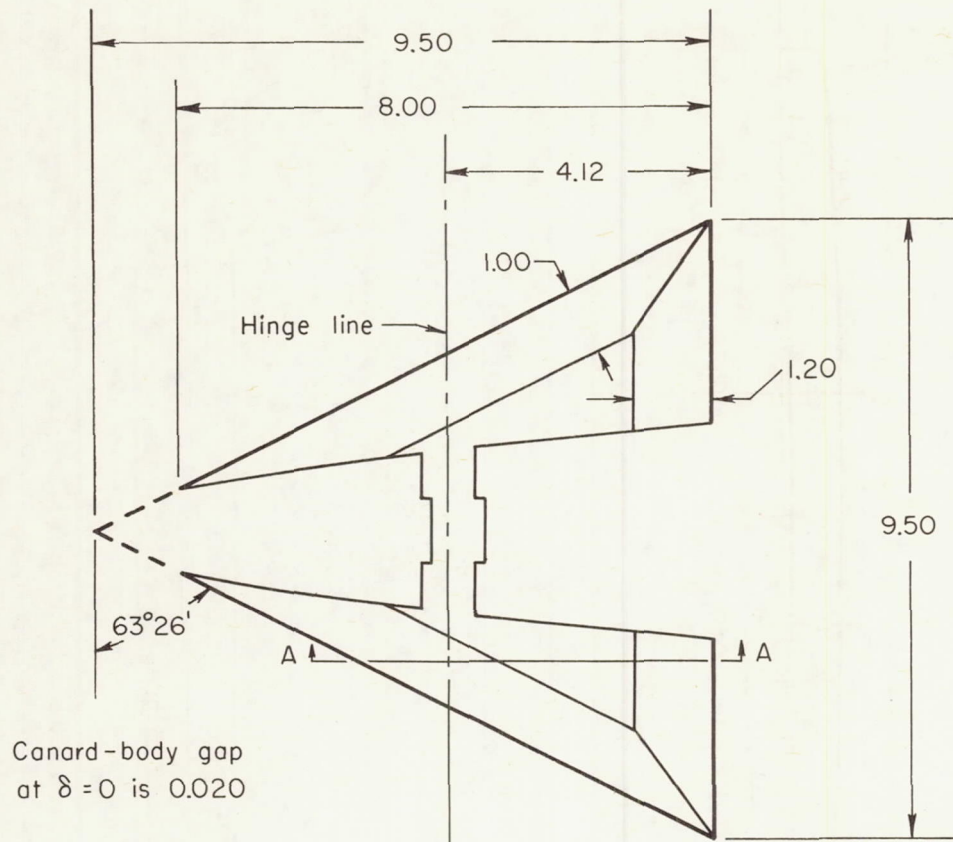
$l_o$  = theoretical body length = 59.50



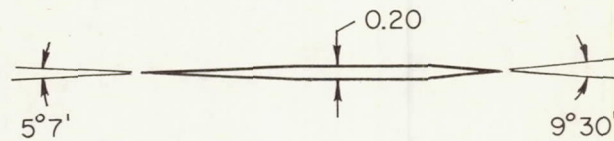
(a) Dimensional sketch of complete model.

Figure 1.- Model details and dimensions.





All dimensions in inches

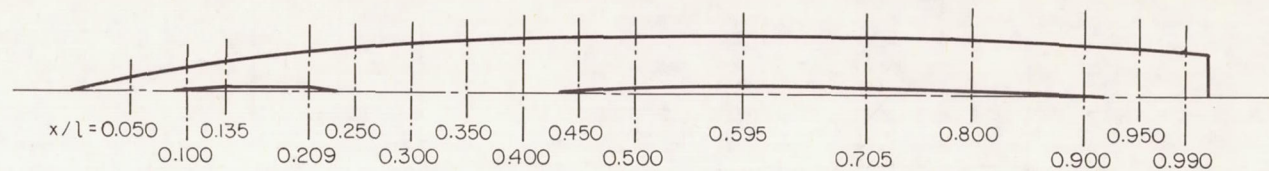
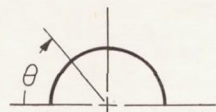


Section A-A

(b) Details of canard.

Figure 1.- Concluded.





At each longitudinal body station orifices are located peripherally as follows:

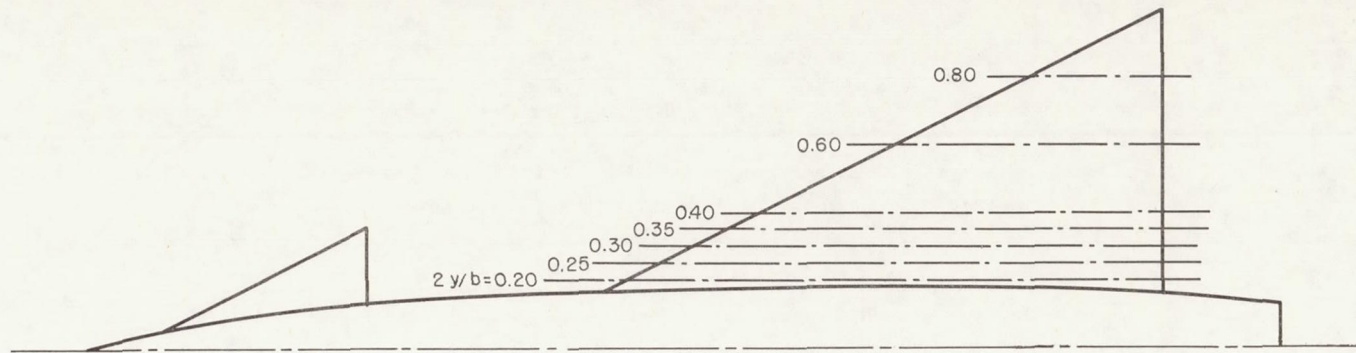
$$\theta/2\pi = 0.05$$

- .15
- .25
- .35
- .45
- .55
- .65
- .75
- .85
- .95

(a) Body.

Figure 2.- Locations of pressure orifices.



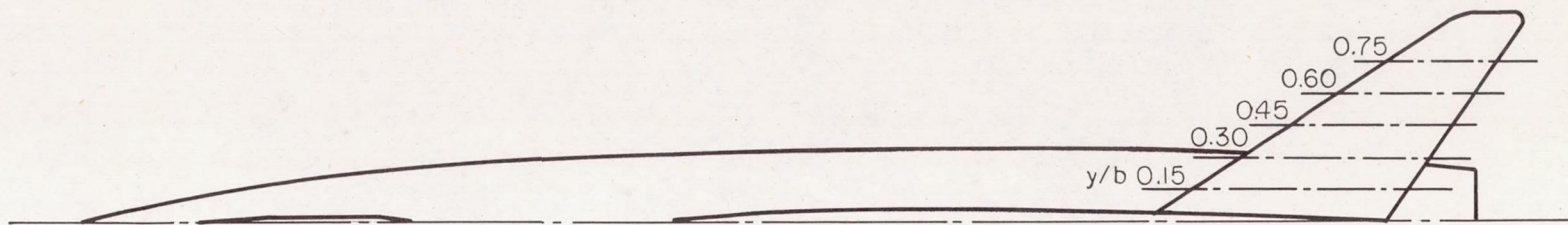


| Wing orifice locations |           |               |           |               |           |               |           |               |           |               |           |               |           |
|------------------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| $2y/b = 0.20$          |           | $2y/b = 0.25$ |           | $2y/b = 0.30$ |           | $2y/b = 0.35$ |           | $2y/b = 0.40$ |           | $2y/b = 0.60$ |           | $2y/b = 0.80$ |           |
| $(x/c)_u$              | $(x/c)_l$ | $(x/c)_u$     | $(x/c)_l$ | $(x/c)_u$     | $(x/c)_l$ | $(x/c)_u$     | $(x/c)_l$ | $(x/c)_u$     | $(x/c)_l$ | $(x/c)_u$     | $(x/c)_l$ | $(x/c)_u$     | $(x/c)_l$ |
| 0.0125                 | 0.0125    | 0.0125        | 0.0125    | 0.0125        | 0.0125    | 0.0125        | 0.0125    | 0.0125        | 0.0125    | 0.0125        | 0.0125    | 0.0125        | 0.0125    |
| .0250                  | .0250     | .0250         | .0250     | .0250         | .0250     | .0250         | .0250     | .0250         | .0250     | .0250         | .0250     | .0250         | .0250     |
| .0500                  | .0500     | .0500         | .0500     | .0500         | .0500     | .0500         | .0500     | .0500         | .0500     | .0500         | .0500     | .0500         | 0.0420    |
| .0750                  | .0750     | .0750         | .0750     | .0750         | .0750     | .0750         | .0750     | .0750         | .0750     | .0750         | .0750     | .0750         | .0500     |
| .1000                  | .1000     | .1000         | .1000     | .1000         | .1000     | .1000         | .1000     | .1000         | .1000     | .1000         | .1000     | .1000         | .0640     |
| .1500                  | .1500     | .1500         | .1500     | .1500         | .1500     | .1500         | .1500     | .1500         | .1500     | .1500         | .1500     | .1500         | .0750     |
| .2000                  | .2000     | .2000         | .2000     | .2000         | .2000     | .2000         | .2000     | .2000         | .2000     | .2000         | .2000     | .2000         | .0810     |
| .3000                  | .3000     | .3000         | .3000     | .3000         | .3000     | .3000         | .3000     | .3000         | .3000     | .3000         | .3000     | .3000         | .1000     |
| .4000                  | .4000     | .4000         | .4000     | .4000         | .4000     | .4000         | .4000     | .4000         | .4000     | .4000         | .4000     | .4000         | .1500     |
| .5000                  | .5000     | .5000         | .5000     | .5000         | .5000     | .5000         | .5000     | .5000         | .5000     | .5000         | .5000     | .5000         | .2000     |
| .6000                  | .6000     | .6000         | .6000     | .6000         | .6000     | .6000         | .6000     | .6000         | .6000     | .6000         | .6000     | .6000         | .3000     |
| .7000                  | .7000     | .7000         | .7000     | .7000         | .7000     | .7000         | .7000     | .7000         | .7000     | .7000         | .7000     | .7000         | .4000     |
| .8000                  | .8000     | .8000         | .8000     | .8000         | .8000     | .8000         | .8000     | .8000         | .8000     | .8000         | .8000     | .8000         | .5000     |
| .9000                  | .9000     | .9000         | .9000     | .9000         | .9000     | .9000         | .9000     | .9000         | .9000     | .9000         | .9000     | .9000         | .6000     |
|                        |           |               |           |               |           |               |           |               |           |               |           | .7000         | .7000     |
|                        |           |               |           |               |           |               |           |               |           |               |           | .8000         | .8000     |
|                        |           |               |           |               |           |               |           |               |           |               |           | .9000         | .9000     |

(b) Wing.

Figure 2.- Continued.





| Vertical-tail orifice locations |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|---------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| y/b = 0.15                      |                    | y/b = 0.30         |                    | y/b = 0.45         |                    | y/b = 0.60         |                    | y/b = 0.75         |                    |
| (x/c) <sub>L</sub>              | (x/c) <sub>R</sub> | (x/c) <sub>L</sub> | (x/c) <sub>R</sub> | (x/c) <sub>L</sub> | (x/c) <sub>R</sub> | (x/c) <sub>L</sub> | (x/c) <sub>R</sub> | (x/c) <sub>L</sub> | (x/c) <sub>R</sub> |
| 0.0250                          | 0.0250             | 0.0250             | 0.0250             | 0.0250             | 0.0250             | 0.0250             | 0.0250             |                    |                    |
| .0500                           | .0500              | .0500              | .0500              | .0500              | .0500              | .0500              | .0500              | .0500              | .0500              |
| .1000                           | .1000              | .1000              | .1000              | .1000              | .1000              | .1000              | .1000              | .1000              | .1000              |
| .1500                           | .1500              | .1500              | .1500              | .1500              | .1500              | .1500              | .1500              | .1500              | .1500              |
| .2000                           | .2000              | .2000              | .2000              | .2000              | .2000              | .2000              | .2000              | .2000              | .2000              |
| .3000                           | .3000              | .3000              | .3000              | .3000              | .3000              | .3000              | .3000              | .3000              | .3000              |
| .4000                           | .4000              | .4000              | .4000              | .4000              | .4000              | .4000              | .4000              | .4000              | .4000              |
| .5000                           | .5000              | .5000              | .5000              | .5000              | .5000              | .5000              | .5000              | .5000              | .5000              |
| .6000                           | .6000              | .6000              | .6000              | .6000              | .6000              | .6000              | .6000              | .6000              | .6000              |
| .7000                           | .7000              | .7000              | .7000              | .7000              | .7000              | .7000              | .7000              | .7000              | .7000              |
| .8000                           | .8000              | .8000              | .8000              | .8000              | .8000              | .8000              | .8000              |                    |                    |

(c) Vertical tail.

Figure 2.- Concluded.